STANDARD 7174-2

First edition
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Furniture — Chairs — Determination of stability —

Part 2:
Chairs with tilting or reclining mechanisms when fully reclined, and rocking chairs

Chaises — Détermination de la stabilité —

Partie 2: Chaises inclinables ou avec mécanisme d'inclinaison complète jusqu'en position de chaise longue, et chaises à bascule

Reference number
ISO 7174-2:1992(E)

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.

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.

International Standard ISO 7174-2 was prepared by Technical Committee ISO/TC 136, *Furniture*, Sub-Committee SC 1, *Test methods*.

ISO 7174 consists of the following parts, under the general title *Furniture — Chairs — Determination of stability*:

— *Part 1: Upright chairs and stools*

— *Part 2: Chairs with tilting or reclining mechanisms when fully reclined, and rocking chairs*

Annex A of this part of ISO 7174 is for information only.

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Furniture — Chairs — Determination of stability —

Part 2:
Chairs with tilting or reclining mechanisms when fully reclined, and rocking chairs

1 Scope

This part of ISO 7174 describes methods for determining the rearward stability of chairs with tilting, reclining and adjustable back angle mechanisms when they are fully tilted or reclined, and of rocking chairs.

Forward and sideward stability of these chairs and of upright chairs is determined by methods described in ISO 7174-1. This part of ISO 7174 describes test methods only for the rearward stability of chairs when fully tilted or reclined, and should not be considered as an alternative test for upright chairs.

The test results are only valid for the article tested. When the test results are intended to be applied to other similar articles, the test specimen should be representative of the production model.

In the case of designs not catered for in the test procedures, the test is to be carried out as far as possible as described, and deviations from the test procedure recorded in the test report.

NOTE 1 This International Standard is one of a series being prepared on the strength, durability and stability of furniture. The series currently consists of the International Standards listed in annex A.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 7174. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 7174 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 7174-1:1988, *Furniture — Chairs — Determination of stability — Part 1: Upright chairs and stools.*

3 Definition

For the purposes of this part of ISO 7174, the following definition applies.

3.1 stability: Ability to withstand forces that tend to cause the article to overturn. (ISO 7174-1:1988)

4 Representation of test person

The test methods are representative of a person sitting with arms stretched out or behind the head and legs under the chair, which is considered to be the configuration of the human form most likely to cause instability in chairs.

The test apparatus represents a person of 110 kg mass and a stature of 190 cm; therefore the test allows for normal dynamic loads generated by persons of less extreme size. The tests do not cover such dynamic activities as the sitter pushing the chair across the floor or tilting the chair violently.

5 Test equipment

5.1 Loading discs, with a mass of 10 kg each, diameter 350 mm and thickness 48 mm.

NOTE 2 For practical reasons this is the preferred test method but the development of apparatus representing the person [described in clause 4, see figure 2 a)] more realistically is considered desirable.