SLOVENSKI STANDARD
SIST EN 12221-2:2008+A1:2013

01-oktober-2013

Izdelki za otroke - Previjalne mize za domačo uporabo - 2. del: Preskusne metode (vključno z dopolnilom A1)

Child use and care articles - Changing units for domestic use - Part 2: Test methods

Artikel für Säuglinge und Kleinkinder - Wickeleinrichtungen für den Hausgebrauch - Teil 2: Prüfverfahren

Articles de puériculture - Dispositifs à langer à usage domestique - Partie 2: Méthodes d'essai

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97.190	Otroška oprema	Equipment for children

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English Version

Child use and care articles - Changing units for domestic use - Part 2: Test methods

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Artikel für Säuglinge und Kleinkinder - Wickeleinrichtungen für den Hausgebrauch - Teil 2: Prüfverfahren

This European Standard was approved by CEN on 18 February 2008 and includes Amendment 1 approved by CEN on 8 July 2013.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN 12221-2:2008+A1:2013) has been jointly prepared by Technical Committee CEN/TC 252 “Child use and care articles”, the secretariat of which is held by AFNOR.

This document has been jointly prepared in collaboration with CEN/TC 207 “Furniture”, the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2014, and conflicting national standards shall be withdrawn at the latest by February 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes [A1] EN 12221-2:2008 [A1].

This document includes Amendment 1 approved by CEN on 2013-07-08.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A1] [A1].

This European Standard is one part of the series of standards of EN 12221 "Changing units for domestic use" consisting of the following parts:

— Part 1: Safety requirements

— Part 2: Test methods

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This part of EN 12221 specifies test methods that assess the safety of changing units.

It should be noted that the effect of ageing and degradation of materials is not included.

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.

!A1) EN 12221-1:2008+A1:2013, *Child use and care articles – Changing units for domestic use – Part 1: Safety requirements* (A1!

ISO 7619-2, *Rubber, vulcanized or thermoplastic – Determination of indentation hardness – Part 2: IRHD pocket meter method*

3 General test conditions

3.1 Preliminary preparation

The sample for testing shall be stored in indoor ambient conditions for at least one week immediately prior to testing – any variations from this procedure shall be justified in the report.

Before testing, any fabrics used shall be cleaned or washed and dried twice following the manufacturer's instructions.

The test shall be carried out in indoor ambient conditions, but if during a test the atmosphere temperature is outside the range 15 °C or above 25 °C, the maximum and/or minimum temperature shall be recorded in the test report.

The changing unit shall be tested as delivered. If of knock-down type, it shall be assembled according to the instructions supplied with the unit. If the changing unit can be assembled or combined in different ways, the most onerous combinations shall be used for each test.

All fittings shall be tightened in accordance with the manufacturer's instructions and shall not be retightened throughout the test procedure.

3.2 Application of forces

The forces in the static load tests shall be applied sufficiently slowly to ensure that negligible dynamic force is applied.

The forces in the durability tests shall be applied at a rate to ensure that excessive heating does not occur.

3.3 Tolerances

Unless otherwise stated, the following tolerances apply:

Forces: ± 5 % of the nominal force;

Masses: ± 0,5 % of the nominal mass;

Dimensions: ± 1,0 mm of the nominal dimension;

Angles: ± 2° of the nominal angle;

Positioning of loading pads: ± 5 mm;

Duration of forces: (2 ± 1) s for durability tests and (10 ± 2) s for static load tests

The tests are described in terms of the application of forces. Masses can however be used. The relationship 10 N = 1 kg may be used for this purpose.

3.4 Test sequence

The tests shall be carried out in the order laid down in this standard and on the same changing unit.

4 Test equipment

4.1 General

Unless otherwise specified, test forces may be applied by any suitable device, which does not adversely affect the results.

4.2 Measuring cones

Cones made of plastics or other hard, smooth material with an angle of 30° ± 0,5° having diameters 25 mm (0/- 0,1 mm), 45 mm (0/+ 0,1 mm) and 65 mm (0/- 0,1 mm) (see Figure 1).

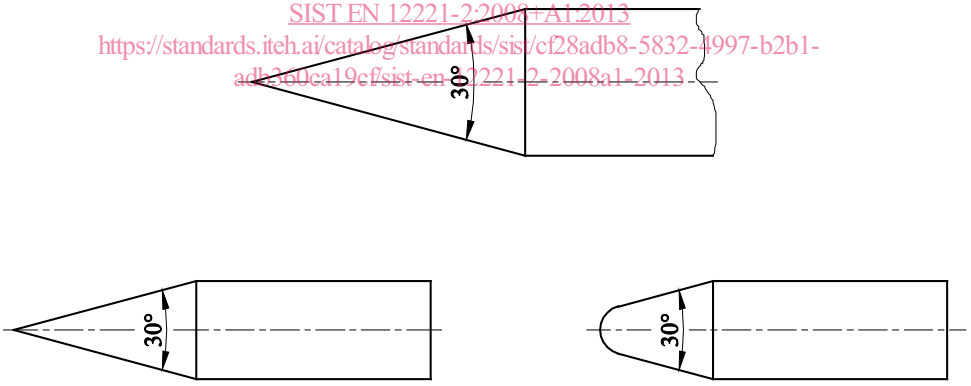
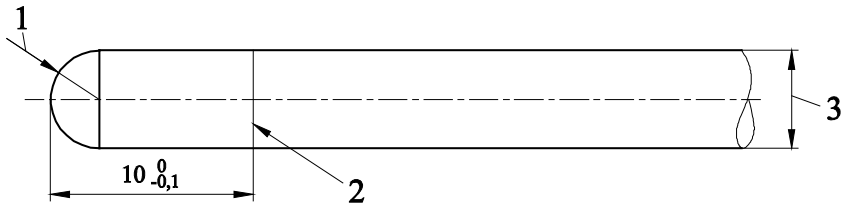


Figure 1 — Examples of measuring cones

4.3 Finger probes

There shall be two probes made from plastics or other hard, smooth material of diameters 7 mm and 12 mm with a full hemispherical end, see Figure 2.

Dimensions in millimetres



Key

1 R 3,5 mm or R 6 mm

2 Line scribed around circumference showing depth of penetration

3 Ø 7 mm (0/ – 0,1) or Ø 12 mm (+0,1/ 0)

Figure 2 — Example of finger probes

4.4 Test cylinder

A cylinder with a hard and smooth surface, 200 mm in diameter, 300 mm in length with a mass of 15 kg (+ 0,075 kg / 0). Its centre of gravity shall be in the centre of the axis of rotation. The edges shall have a radius of 5 mm.

4.5 Test floor for floor standing units

The test floor shall be horizontal, rigid, flat and smooth.

4.6 Test wall for wall mounted units

The test wall shall be vertical, rigid, flat and smooth.

4.7 Test base for bath mounted units

Test base for bath mounted units representing the upper bath wall section made of hard and smooth material with dimensions in accordance with Figure 9b). The profiles shall be fixed parallel to the distance equal to the minimum bath dimension recommended by the manufacturer.

4.8 Stops

Stops to prevent the article from sliding but not tilting, not higher than 12 mm except in cases where the design of the item necessitates the use of higher stops, in which case the lowest that will prevent the item from moving shall be used.

4.9 Test mass

Cylindrical test mass of 5 kg and diameter not greater than 200 mm.

4.10 Small parts cylinder

Cylinder with dimensions as given in Figure 3.

Dimensions in millimetres

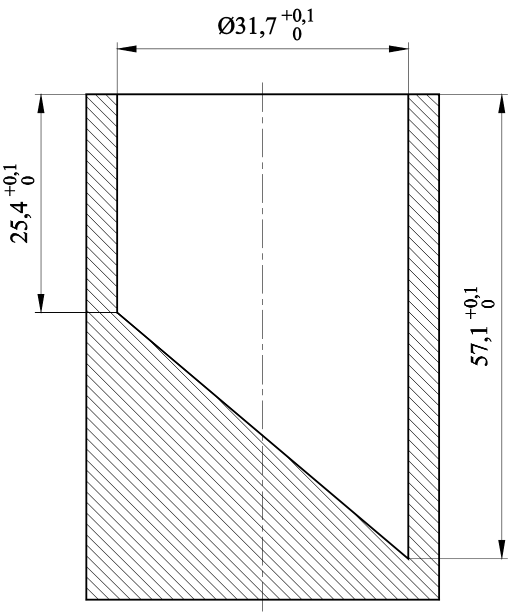


Figure 3 — Small parts cylinder

4.11 Test beam

A1) Test beam with a width of 80 mm, a length of 1 100 mm and a mass of 1,75 kg ± 0,01 kg. The test beam shall have holes with a diameter of 8 (+ 0,2/0) mm, drilled through its 80 mm wide face and symmetrically placed about its centre point.

There shall be pairs of holes with distances between the centre points of the two holes equal to: 372 mm, 542 mm, 642 mm, 742 mm. An additional hole is required at the centre point of the test beam.

NOTE The distances between the centre points of the pair of holes are equal to the minimum length and width specified in EN 12221-1:2008+A1:2013, 4.1, minus 8 mm, in such a way that the distance between the furthest points of two holes is equal to the minimum length and width specified in EN 12221-1:2008+A1:2013, 4.1. (A1

4.12 Measuring rods for test beam

Measuring rod of 8 (-0,2/0) mm diameter with an adjustable collar and its lower end hemispherical. The total mass of one measuring rod and collar shall be 0,12 kg.

4.13 Tube

Tube with an inner diameter of 60 mm and a length of 575 mm.

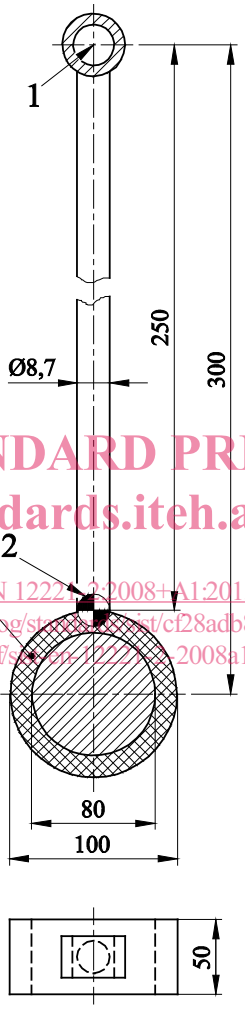
4.14 Steel ball

Solid steel sphere with a diameter of 50 mm and a mass of 510 g.

4.15 Side impacter

Cylindrical pendulum (see Figure 4) made of steel and with the head of the pendulum surrounded by a 10 mm thick layer of rubber of hardness 76 to 78 IRHD in accordance with ISO 7619-2. The centre of gravity shall be 250 mm from the centre of the pivot point A. The point of impact shall be 300 mm from the pivot point A. The total mass shall be 2 kg.

Dimensions in millimetres



Key

1 Pivot point A

2 Centre of gravity

3 Rubber 76 to 78 IRHD

NOTE 8.7mm is the approximate diameter of a solid steel rod.

Figure 4 — Side impacter