# SLOVENSKI PREDSTANDARD

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**Otroški visoki stoli - 2. del: Preskusne metode**

Children's high chair - Part 2: Test methods



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# Children's high chair - Part 2: Test methods

Kinderhochstühle - Teil 2: Prüfverfahren

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## Foreword

This document (prEN 14988-2:2004) has been prepared by BT/TF 144 "High Chairs", the secretariat of which is held by UNI.

This document is currently submitted to the CEN Enquiry.

This document will supersede ENV 1178-2:1994.

## Introduction

This part of prEN 14988 has been prepared in order to provide assurance that children's high chairs complying with the requirements in Part 1 are reasonably safe.

The tests are designed to evaluate properties without regard to materials, design/construction or manufacturing processes.

# 1 Scope

This part of prEN 14988 specifies test methods for the assessment of the safety of children's high chairs.

If a high chair can be converted into a product with other functions, the additional functions are not covered by this standard.

# 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.

prEN 14988-1[1)] , *Furniture – Children's high chairs - Part 1: Safety requirements*

ISO 7619:1997, *Rubber - Determination of indentation hardness by means of pocket hardness meters*

# 3 Terms and definitions

For the purposes of this European Standard the terms and definitions specified in prEN 14988-1 apply.



# 4 General test conditions

## 4.1 Preliminary preparation

The tests are designed to be applied to a high chair that is fully assembled and ready for use.



The test unit shall be stored in indoor ambient conditions for at least one week immediately prior to testing. Any deviation from this procedure shall be stated in the test report.

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

The high chair shall be tested as delivered. If of knock down type it shall be assembled according to the manufacturer's instructions supplied with the high chair. If the high chair can be assembled or combined in different ways or if components can be adjusted, the most adverse combination/adjustment shall be used for each test.

Knock-down fittings shall be tightened before testing. Further re-tightening shall not take place unless this is specifically required by the manufacturer.

In the case of designs not catered in the test procedures, the tests shall be carried out as far as possible as described, and a list made of the deviations from the test procedures.

## 4.2 Test sequence

The tests shall be carried out in the order laid down in this standard.

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1) To be published

### 4.3 Tolerances

Unless otherwise stated, the following tolerances apply:

— Forces: ± 5%;

— Masses: ± 0,5%;

— Dimensions: ± 1,0 mm;

— Angles: ± 2°.

### 4.4 Inspection and assessment of results

Before beginning the tests, visually inspect the high chair thoroughly. Record defects so that they are not assumed to have been caused by the test.

After completion of each test, carry out inspection again. Record changes that have taken place since the initial inspection. The inspection shall include, if relevant:

a) whether there are sharp edges or burrs;

b) whether the functions of the locking mechanisms are unimpaired;

c) whether the function of the high chair are unimpaired;

d) whether the sizes of the openings have changed so they present a safety hazard;

e) whether the stability of the high chair is unimpaired.



## 5 Test equipment

### 5.1 General

Unless otherwise specified, test forces may be applied by any suitable device because results are dependent only upon correctly applied forces and not upon the apparatus.

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

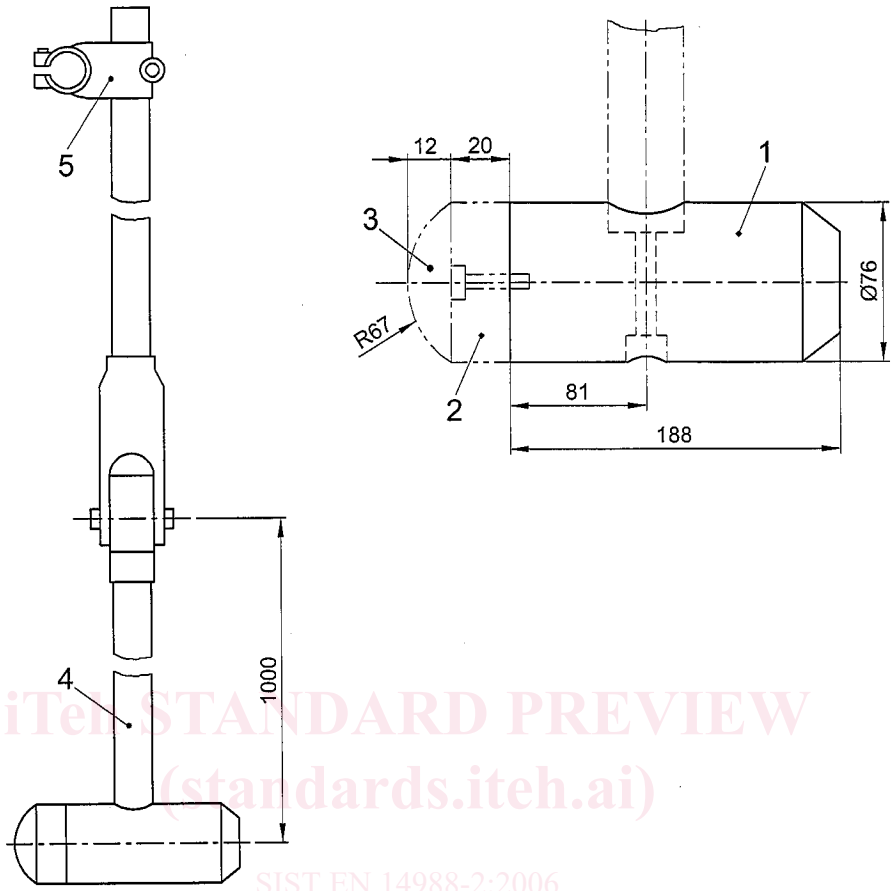
### 5.2 Test dummy

A solid cylinder 200 mm in diameter and 300 mm in height, having a mass of 15 kg and with its centre of gravity 150 mm above its base. All the edges of the cylinder shall have a radius of 5 mm. Two safety harness anchorage points shall be provided. These shall be positioned 150 mm from the base and 180° to each other around the circumference.

### 5.3 Impact hammer

A striker in the form of a cylindrical object having a total mass of 6,5 kg supported from a pivot by a steel tube of 38 mm in diameter and with a wall thickness of 2 mm (see Figure 1). The distance between the pivot and the centre of gravity of the striker shall be 1000 mm. The pendulum arm shall be pivoted by a low friction bearing.

Dimensions in millimetres






**Key**

1 Pendulum head, steel mass 6,4 kg

2 Hardwood

3 Rubber 50 IRHD (ISO 7619)

4 Pendulum arm, length 950 mm; high tensile steel tube ∅ 38 x 2 mm; mass 2 kg +/- 0,2 kg

5 Pivot point

Mass of assembly (Pos. No 1,2 and 3): 6,5 kg +/- 0,07 kg

**Figure 1 — Impact hammer**

### 5.4 Loading pad

A rigid cylindrical object 100 mm in diameter having a smooth hard surface and rounded edges

### 5.5 Stops

Stops to prevent the article from sliding but not tilting, no higher than 12 mm except in cases where the design of the item necessitates the use of higher stops, in which case the lowest stops that will prevent the item from moving shall be used.

### 5.6 Floor surface

Horizontal, flat and rigid with a smooth surface. For the test 6.2 a rubber mat 2 mm thick, with hardness 85 ± 5 IRHD according to ISO 7619-97 , shall be used on a concrete floor.

### 5.7 Beams

#### 5.7.1 Beam for stability test

A beam, 900 mm long with a mass of max. 0,5 kg.

#### 5.7.2 Beam for height of lateral protection test

A beam, 86 mm wide.



### 5.8 Slide gauges

Cones with an angle of 30°± 0,5° made of plastics or other hard, smooth material mounted on a force measuring device (see Figure 2). There shall be four cones having diameters 5 mm (-0,1/+0 mm), 7 mm (-0,1/+0 mm), 12 mm (0/+0,1 mm) and 18 mm ( 0/+0,1 mm).



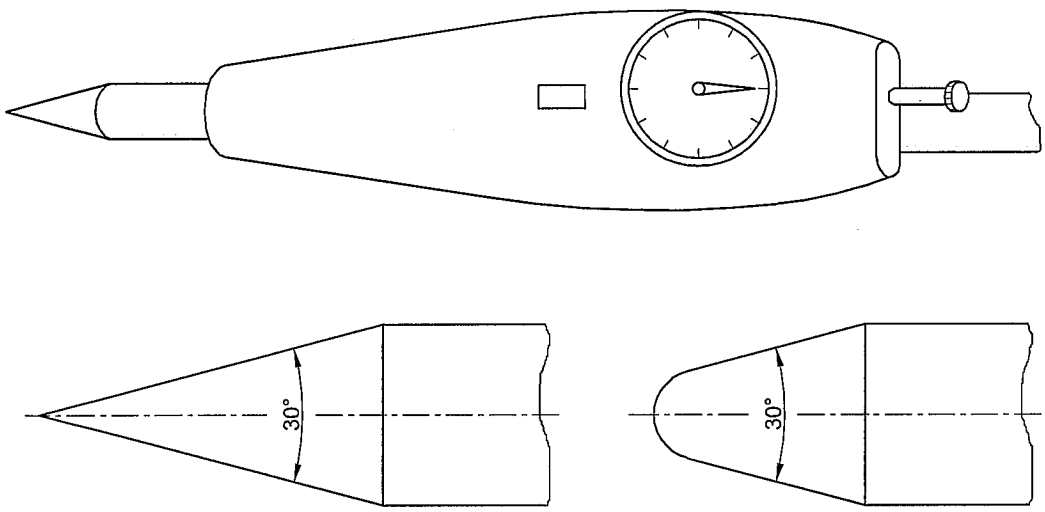



**Figure 2 — Example of slide gauges**

### 5.9 Force-measuring device

E.g. a dynamometer.

### 5.10 Test load

Steel cylinder of 5 kg with 100 mm diameter.

### 5.11 Cylinder

Cylinder for assessment of small components, having dimensions in accordance with Figure 3.

Dimensions in millimetres

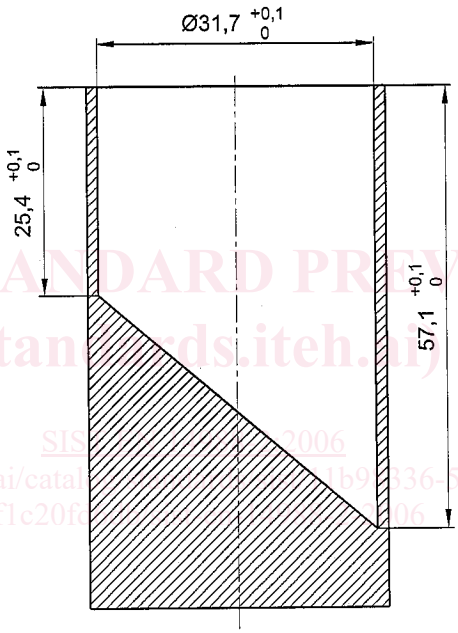



**Figure 3 — Test cylinder**

### 5.12 Small torso probe

The small torso probe shall be made from plastics or other hard, smooth material with dimensions as shown in Figure 4.