

Roll containers - Part 4: Performance requirements

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12674-4:2007 sisaldab Euroopa standardi EN 12674-4:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.01.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12674-4:2007 consists of the English text of the European standard EN 12674-4:2006.</p> <p>This document is endorsed on 29.01.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European Standard specifies appropriate tests and levels of performance for roll containers and dollies manufactured in all materials, assembled for use and stacked for storage when tested in accordance with EN 12674-3.</p>	<p>Scope: This European Standard specifies appropriate tests and levels of performance for roll containers and dollies manufactured in all materials, assembled for use and stacked for storage when tested in accordance with EN 12674-3.</p>
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English Version

Roll containers - Part 4: Performance requirements

Conteneurs à roulettes - Partie 4: Exigences de performances

Rollbehälter - Teil 4: Leistungsanforderungen

This European Standard was approved by CEN on 4 November 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 12674-4:2006) has been prepared by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR.

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 June 2007 and conflicting national standards shall be withdrawn at the latest by June 2007.

This European Standard is part of a series of four standards for roll containers and dollies; no existing document is being replaced. The other parts are entitled as follows:

Roll containers – Part 1: Terminology

Roll containers – Part 2: General design and safety principles

Roll containers – Part 3: 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

Roll containers and dollies are equipment intended for moving goods. They comprise apparatus fitted with fixed and/or swivel castors. For roll containers the superstructure comprises two or more frames which provide retention for items requiring transport and/or distribution.

Dollies and roll containers can be supplied in a variety of materials and additionally roll containers are supplied in four main styles. One of these styles, the nesting style, is further sub-divided into five derived forms and the demountable style is sub-divided into two derived forms. EN 12674-1 gives details of how these styles differ. EN 12674-2 gives methods of measuring working dimensions and aspects of design that manufacturers need to be aware of. Test methods are given in EN 12674-3 which are supported by performance levels in this European Standard, which take account of the normal static and dynamic loads applied in use.

This European Standard specifies minimum levels of performance for critical tests, in particular with reference to safety. Certain tests which are related only to longevity, quality control or need development are optional and if carried out may be subject to agreement between manufacturer and user. Tests are applied to fully assembled roll container and dolly specimens as indicated in Table 1. Dismantled or nested roll containers are not subjected to testing; however, empty dollies stacked ready for use, storage or transit are to be subjected to normative testing in order to determine a safe number of stacked units.

In order to calculate applied test loads a nominal safe working load (SWL) of 250 kg is assumed in this European Standard for every specimen. The value of 250 kg is not a normative level and may be reduced or increased by the testing body in collaboration with the specimen supplier/manufacturer. However, if different, the level used should be clearly stated in the test report.

1 Scope

This European Standard specifies appropriate tests and levels of performance for roll containers and dollies manufactured in all materials, assembled for use and stacked for storage when tested in accordance with EN 12674-3.

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.

EN 12674-1:1999, *Roll containers — Part 1: Terminology*

EN 12674-2:2001, *Roll containers — Part 2: General design and safety principles*

EN 12674-3:2004, *Roll containers — Part 3: Test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12674-1:1999 and the following apply.

3.1

line of tilt XX

axis in the horizontal plane about which an unstable roll container or dolly will eventually topple

NOTE Shown as axis XX in Figure 2 of EN 12674-3:2004.

3.2

angle of tilt (alpha) α

angle measured against the major horizontal axis of the length or width of the roll container and the line of tilt

NOTE 1 Shown in Figure 2 of EN 12674-3:2004.

NOTE 2 Length and width are defined in 4.1 of EN 12674-2:2001.

3.3

angle of inclination – (beta) β

angle in a vertical plane, normal to the line of tilt, at which the roll container becomes unstable and topples sideways

NOTE Shown in Figures 1a and 1b of EN 12674-3:2004.

3.4

geometric centre

centre point in plan elevation generated by the intersection of two imaginary lines from the opposite internal corners of the base

3.5

vertical axis

central axis of a roll container or dolly passing through the geometric centre