Luuktõstukid. Ratassõidukitele paigaldatavad platvormtõstukid. Ohutusnõuded. Osa 2: Reisijate tõstukid KONSOLIDEERITUD TEKST

Tail lifts - Platform lifts for mounting on wheeled vehicles - Safety requirements - Part 2: Tail lifts for passengers CONSOLIDATED TEXT

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1756-2:2004+A1:2009 sisaldab Euroopa standardi EN 1756-2:2004+A1:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 1756-2:2004+A1:2009 consists of the English text of the European standard EN 1756-2:2004+A1:2009.
Standard on kinnitatud Eesti Standardikeskuse 30.09.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.09.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.07.2009.	Date of Availability of the European standard text 15.07.2009.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 53.020.99

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1756-2:2004+A1

July 2009

ICS 53.020.99

Supersedes EN 1756-2:2004

English Version

Tail lifts - Platform lifts for mounting on wheeled vehicles - Safety requirements - Part 2: Tail lifts for passengers

Hayons élévateurs - Hayons élévateurs à monter sur véhicules roulants - Prescriptions de sécurité - Partie 2: Hayons élévateurs pour passagers

Hubladebühnen - Plattformlifte für die Anbringung an Radfahrzeugen - Sicherheitsanforderungen - Teil 2: Hubladebühnen für Passagiere

This European Standard was approved by CEN on 5 May 2004 and includes Amendment 1 approved by CEN on 19 June 2009.

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 CEN Management Centre 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 1756-2:2004+A1:2009: E

Contents

page

Foreword

This document (EN 1756-2:2004+A1:2009) has been prepared by Technical Committee CEN/TC 98 “Lifting platforms”, the secretariat of which is held by DIN.

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 January 2010, and conflicting national standards shall be withdrawn at the latest by January 2010.

This document includes Amendment 1, approved by CEN on 2009-06-19.

This document supersedes EN 1756-2:2004.

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

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

⟨A1⟩ For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. ⟨A1⟩

This standard comprises two parts:

Part 1 relates specifically to tail lifts for goods (whether or not accompanied by an operator);

Part 2 covers the special requirements of tail lifts for passengers, including those with disabilities.

This document includes a Bibliography.

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, 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

The machinery concerned and the extent to which hazards are covered are indicated in the scope of this standard.

While producing this standard, it was assumed that:

— only trained persons operate the machine;

— components without specific requirements are:

a) designed in accordance with the usual engineering practice and calculation codes, including all failure modes;

b) of sound mechanical and electrical construction;

c) made of materials, with adequate strength and of suitable quality;

d) free of defects;

— harmful materials, such as asbestos are not used;

— components are kept in good repair and working order, so that the required dimensions remain fulfilled despite wear;

— by design of the load bearing elements, a safe operation of the machine is assured for loading ranging from zero to 100 % of the rated possibilities and during the tests;

— a mechanical device built according to good practice and the requirements of the standard, will not deteriorate to a point of creating a hazard without the possibility of detection;

— the equipment is capable of operating correctly within a temperature range of – 15 °C to + 40 °C;

— a negotiation takes place between the manufacturer of the tail lift and the installer for the characteristics of the supporting wheeled vehicle (see also clause 6), the fitting of the tail lift on or in the vehicle and between the installer and the user relating to the specific conditions of the use, places of use of the machinery, also some of the characteristics of the vehicle and the appropriate language;

— the working area is adequately lit (if lighting is not provided with the tail lift);

— if the place of installations allows a vertical falling height of persons of more than 3 m notwithstanding the limited travel height indicated in the scope, means external to the machine are used to limit this falling height to 3 m.

〚A1〛 This European Standard is a type C standard as stated in EN ISO 12100. 〈A1〉

When the provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been built according to the provisions of this type C standard.

1 Scope

Part 2 of standard EN 1756 specifies safety requirements for design of tail lifts as defined in 3.1 for mounting on wheeled passenger vehicles.

Vehicles for the loading of disabled passengers onto aircraft and ships are included within the scope of the standard (although dock-mounted lifts are excluded).

It also specifies the verification of such tail lifts and the safety information that shall be provided for their use.

This document deals with the technical requirements to minimise the hazards listed in clause 4 which can arise during the operation of tail lifts when carried out in accordance with the specifications as intended by the manufacturer or his authorised representative.

It applies to passenger tail lifts:

— used for the purpose of embarking and/or disembarking passengers to and from such vehicles;

— intended to be fitted, temporarily or permanently, either inside or on the front, side or rear of the wheeled vehicle;

— driven either by hand or by electric power;

— equipped with a platform to support passengers who may be pedestrians or riders in wheelchairs and may be accompanied by an attendant.

Embarking and/or disembarking operations include the use of a tail lift to lift and/or lower passengers, and if specifically approved by the manufacturer, for use as a link bridge.

The standard covers the significant hazards which could occur when a tail lift is used as intended and under the conditions foreseen by the manufacturer. A list of significant hazards is given in clause 4.

This document is not applicable to tail lifts which are manufactured before the date of publication of this document by CEN.

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 574:1996, *Safety of machinery — Two-hand control devices — Functional aspects — Principles for design*

EN 811, *Safety of machinery — Safety distances to prevent danger zones being reached by the lower limbs*

EN 982, *Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics*

EN 60204-1:1997, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:1997)*

EN 61310-2, *Safety of machinery — Indication, marking and actuation — Part 2: Requirements for marking (IEC 61310-2:1995)*

EN ISO 12100-1, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)*

EN ISO 12100-2:2003, *Safety of machinery — Basic concepts, general principles for design — Part 2 Technical principles and specifications (ISO 12100-2:2003)*

EN ISO 14122-2, *Safety of machinery — Permanent means of access to machinery - Part 2: Working platforms and walkways (ISO 14122-2:2001)*

3 Terms and definitions

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

3.1
tail lift
lifting device suitable for installation on or in a wheeled passenger vehicle and which is used for embarking passengers into or disembarking passengers from such a vehicle. Such passengers may in particular be of reduced mobility and include those in wheelchairs

The device consists essentially of a platform, a drive system, a support structure and one or more control positions

3.2
link bridge
application of a tail lift in which the platform is used to span from its associated vehicle to any elevated position for the purpose of transferring passengers to or from the vehicle

3.3
tail lift mechanisms
see annex A (informative)

3.4
types of Tail lifts
see annex A (informative)

3.5
wheeled passenger **vehicle**
vehicle, or vehicle body which is intended for carrying persons, for road, off-road or rail transport, see also scope

3.6
operator
any person given the task of operating the tail lift

NOTE 1 This is a restricted version of the definition given in EN ISO 12100-1.

NOTE 2 The operator may in certain cases be a trained passenger.

3.7
responsible person
any person – driver, trained attendant, conductor – who is in charge of supervising the use of the tail lift

3.8
manufacturer
the one which makes the tail lift