

SVENSK STANDARD

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Säkerhetskrav för lyftbord – Del 2: Lyftbord som betjänar mer än två fasta stannplan i en byggnad, för transport av gods med en maximal vertikal hastighet av 0,15 m/s

Safety requirements for lifting tables – Part 2: Lifting tables serving more than 2 fixed landings of a building, for lifting goods with a vertical travel speed not exceeding 0,15 m/s

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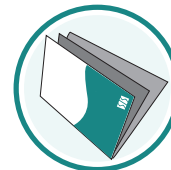
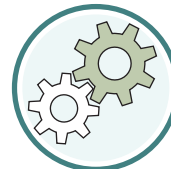
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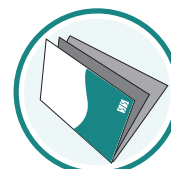
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EUROPEAN STANDARD

EN 1570-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2016

ICS 53.020.99

English Version

Safety requirements for lifting tables - Part 2: Lifting tables serving more than 2 fixed landings of a building, for lifting goods with a vertical travel speed not exceeding 0,15 m/s

Prescriptions de sécurité des tables élévatrices - Partie 2 : Tables élévatrices desservant plus de deux paliers fixes d'un bâtiment utilisées pour transporter des marchandises et dont la vitesse ne dépasse pas 0,15 m/s

Sicherheitsanforderungen an Hubtische - Teil 2: Hubtische zum Heben von Gütern, die mehr als 2 Haltestellen eines Gebäudes anfahren und deren Hubgeschwindigkeit 0,15 m/s nicht überschreitet

This European Standard was approved by CEN on 27 August 2016.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 1570-2:2016) has been prepared by Technical Committee CEN/TC 10 “Lifts, escalators and moving walks”, 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 May 2017, and conflicting national standards shall be withdrawn at the latest by May 2017.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports the essential requirements of 2006/42/EU.

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

For the relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

Introduction

This European Standard document was drafted as a design guidance manual to provide a means of achieving conformance to the essential safety requirements stipulated under Machinery Directive 2006/42/EC.

The machines concerned and the extent to which hazards, hazardous situations and hazardous incidents are covered are indicated in the scope of this European Standard. In addition, the machines should be designed according to the principles of EN ISO 12100 for relevant but non significant hazards, which are not dealt with in this standard.

As lifting tables are used in a wide range of applications, it is equally necessary to perform individual risk assessments in accordance with EN ISO 12100 for the actual operating conditions.

Products sold indirectly to end-users should be built to cover all the risks related to the use and all conditions foreseeable by the manufacturer, as described in the instruction manual.

Where the text gives an example of a safety measure for the purposes of greater clarity, this should not be considered as the only possible solution. Any other solution leading to the same risk reduction is permissible if an equivalent or increased level of safety is achieved.

While drafting this European Standard document, it was assumed that:

- the lifting tables are only operated by persons trained in using the equipment in accordance with the manufacturer's instructions, and that the working area is adequately lit;
- the lifting tables are installed on hard-standing, even, appropriately prepared surfaces.
- where there are special requirements on low noise levels, such as for hospital applications and theatres etc., the customer should specify these requirements and the manufacturer should then take all appropriate measures.

When 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 designed and built according to the provisions of this type C standard.

SS-EN 1570-2:2016 (E)

1 Scope

1.1 This European Standard specifies the safety requirements applicable to lifting tables presenting the following characteristics:

- serving more than two fixed landings of a construction;
- able to pass landings;
- designed exclusively for lifting or lowering goods and not persons;
- only accessible to persons during the loading/unloading phases;
- with a travel speed of no more than 0,15 m/s;
- permanently installed.

1.2 This European Standard deals with all significant hazards pertinent, with the exception of noise, to lifting tables when used as intended and under the conditions foreseen by the manufacturer (see Clause 4). This European Standard specifies the appropriate technical measures for eliminating and reducing the risks arising from the significant hazards.

1.3 This European Standard does not apply to the following equipment:

- permanently installed lifting tables, serving specific levels of a construction, with a vertical travel speed exceeding 0,15 m/s (EN 81-31);
- lifting tables serving not more than two fixed landings of a construction (EN 1570-1);
- lifting tables, serving more than 2 fixed landings of a construction for lifting operators, with a vertical travel speed not exceeding 0,15 m/s;
- lifting tables carrying operators and installed in enclosures with a vertical travel speed not exceeding 0,15 m/s;
- lifting tables used on ships;
- lifting tables designed for artists and stage set features during artistic performances;
- lifting tables driven by pusher chains.

1.4 This European Standard does not establish the additional requirements for:

- electromagnetic compatibility;
- operation in severe conditions (e.g. extreme climates, freezer applications, strong magnetic fields);
- operation subject to special rules (e.g. potentially explosive atmospheres, mines);
- handling of loads, the nature of which could lead to dangerous situations (e.g. molten metal, acids, radiating materials, particularly brittle loads, loose loads (gravel, tubes));
- hazards occurring during construction, transportation and disposal;

- equipment installed on the load platform or the replacing or maintaining of it;
- integration into broader systems or other machines, etc.;
- cable-less controls;
- lifting tables where the hydraulic pressure is derived directly from gas pressure;
- lifting tables powered by internal combustion engines.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 349:1993+A1:2008, *Safety of machinery - Minimum gaps to avoid crushing of parts of the human body*

EN 13001 (all parts), *Cranes - General design*

EN 60204-1:2006¹, *Safety of machinery - Electrical equipment of machines - Part 1: General requirements (IEC 60224-1:2005, modified)*

EN 60204-32:2008, *Safety of machinery - Electrical equipment of machines - Part 32: Requirements for hoisting machines (IEC 60204-32:2008)*

EN 60529:1991², *Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)*

EN 60947-5-1:2004,³ *Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices (IEC 60947-5-1:2003)*

EN 60947-5-3:2013, *Low-voltage switchgear and controlgear - Part 5-3: Control circuit devices and switching elements - Requirements for proximity devices with defined behaviour under fault conditions (PDDb) (IEC 60947-5-3:2013)*

EN 61310-2:2008, *Safety of machinery - Indication, marking and actuation - Part 2: Requirements for marking (IEC 61310:2007)*

EN 61496-1:2013, *Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests (IEC 61496-1:2012)*

EN 61496-2:2013, *Safety of machinery - Electro-sensitive protective equipment - Part 2: Particular requirements for equipment using active opto-electronic protective devices (AOPDs) (IEC 61496-2:2013)*

EN ISO 4413:2010, *Hydraulic fluid power - General rules and safety requirements for systems and their components (ISO 4413:2010)*

EN ISO 12100:2010, *Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)*

¹ As impacted by EN 60204-1:2006/A1:2009.

² As impacted by EN 60529:1991/A1:2000 and EN 60529:1991/A2:2013

³ As impacted by EN 60947-5-1:2004/A1:2009