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Transport platforms

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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English Version

Transport platforms

Plate-formes de transport

Transportbühnen

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky

EN 16719:2018 (E)

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European foreword

This document (EN 16719:2018) 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of an identical text or by endorsement, at the latest by August 2018, and conflicting national standards shall be withdrawn at the latest by August 2018.

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.

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).

For relationship with EU Directive 2006/42/EC, 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European Standard is one of a series of standards produced by CEN/TC 10/SC 1 "Building hoists" as part of the CEN programme of work to produce machinery safety standards. The standard is a Type C standard relating to safety for transport platforms.

The extent to which hazards are covered is indicated in the scope of this European Standard. In addition, machinery shall comply as appropriate with EN ISO 12100:2010 for hazards which are not covered by this European Standard.

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.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this European Standard.

1 Scope

1.1 Temporarily-installed, guided powered platforms with rack and pinion drive, which have an open platform and hold-to-run controls operated by authorized, trained operators on the platform.

Used for transporting authorized passengers and materials vertically (or along the path 15° maximum of the vertical), at limited speed, with a minimum safety offset distance and serving fixed levels on a building or structure for construction related activities including renovation and maintenance.

This European Standard does not include

- a) hydraulic drives for transport platforms;
- b) wire rope drives for transport platforms;
- c) chain drives for transport platforms;
- d) use as a Mast Climbing Work Platform (see EN 1495);
- e) use as a Goods Hoist (see EN 12158-1);
- f) use as a Passenger/Goods Hoist (see EN 12159).

1.2 This European Standard identifies hazards as listed in Clause 4 which arise during the various phases in the life of such equipment and describes methods for the elimination or reduction of these hazards when used as intended by the manufacturer.

- **1.3** This European Standard does not specify the additional requirements for
- a) operation in severe conditions (e.g. extreme climates, strong magnetic fields);
- b) lightning protection;
- c) operation subject to special rules (e.g. potentially explosive atmospheres);
- d) electromagnetic compatibility (emission, immunity);
- e) handling of loads the nature of which could lead to dangerous situations (e.g. molten metal, acids/bases;
- f) radiating materials, fragile loads);
- g) the use of combustion engines;
- h) the use of remote controls;
- i) hazards occurring during manufacture;
- j) hazards occurring as a result of mobility;
- k) hazards occurring as a result of being erected over a public road;
- l) earthquakes;

- m) noise.
- 1.4 This European Standard is not applicable to
- a) builders hoists for materials (see EN 12158-1);
- b) builders hoists for persons and materials (see EN 12159);
- c) lifts (see EN 81-3 and EN 81-20);
- d) inclined hoists (see EN 12158-2);
- e) inclined lifts (see EN 81-22);
- f) lifting tables (see EN 1570-1);
- g) mast climbing work platforms (see EN 1495);
- h) work cages suspended from lifting appliances;
- i) work platforms carried on the forks of fork trucks;
- j) work platforms;
- k) funiculars;
- l) lifts specially designed for military purposes;
- m) mine lifts;
- n) theatre elevators;
- o) special purpose lifts.

1.5 This European Standard deals with the transport platform installation. It includes the base frame and base enclosure but excludes the design of any concrete, hard core, timber or other foundation arrangement. It includes the design of mast ties but excludes the design of anchorage bolts to the supporting structure. It includes the landing gates and their frames but excludes the design of any anchorage fixing bolts to the supporting structure.

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 81-20:2014, Safety rules for the construction and installation of lifts - Lifts for the transport of persons and goods - Part 20: Passenger and goods passenger lifts

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

EN 1037:1995+A1:2008, Safety of machinery - Prevention of unexpected start-up

EN 60204-1:2006, Safety of machinery - Electrical equipment of machines - Part 1: General requirements

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

EN 60529:1991, Degrees of protection provided by enclosures (IP Code)

EN 60947-5-1:2004, Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices

EN ISO 4871:2009, Acoustics - Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)

EN ISO 7731:2008, Ergonomics - Danger signals for public and work areas - Auditory danger signals (ISO 7731:2003)

EN ISO 11688-1:2009, Acoustics - Recommended practice for the design of low-noise machinery and equipment - Part 1: Planning (ISO/TR 11688-1:1995)

EN ISO 11688-2:2000, Acoustics. Recommended practice for the design of low-noise machinery and equipment. Part 2: Introduction to the physics of low-noise design (ISO/TR 11688-2:1998)

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

EN ISO 13849-1:2015, Safety of machinery- Safety-related parts of control systems - Part 1: General principles for design (ISO 13849-1:2015)

EN ISO 13849-2:2012, Safety of machinery - Safety-related parts of control systems - Part 2: Validation (ISO 13849-2:2012)

EN ISO 13850:2015, Safety of machinery — Emergency stop — Principles for design (ISO 13850:2015)

EN ISO 13857:2008, Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2008)

EN ISO 14119:2013, Safety of machinery - Interlocking devices associated with guards - Principles for design and selection (ISO 14119:2013)

ISO 4302:2016, Cranes — Wind load assessment

ISO 6336-1:2006, Calculation of load capacity of spur and helical gears — Part 1: Basic principles, introduction and general influence factors

ISO 6336-2:2006, Calculation of load capacity of spur and helical gears — Part 2: Calculation of surface durability (pitting)

ISO 6336-3:2006, Calculation of load capacity of spur and helical gears — Part 3: Calculation of tooth bending strength

ISO 6336-5:2016, Calculation of load capacity of spur and helical gears — Part 5: Strength and quality of materials

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