

Institut luxembourgeois de la normalisation de l'accréditation, de la sécurité et qualité des produits et services

ILNAS-EN 16307-1:2013+A1:2015

Industrial trucks - Safety requirements and verification - Part 1:
Supplementary requirements for self-propelled industrial trucks, other than

Chariots de manutention - Exigences de sécurité et vérification - Partie 1: Exigences supplémentaires pour les chariots de manutention automoteurs,

Flurförderzeuge -Sicherheitsanforderungen und Verifizierung - Teil 1: Zusätzliche Anforderungen für motorkraftbetriebene

#### **National Foreword**

This European Standard EN 16307-1:2013+A1:2015 was adopted as Luxembourgish Standard ILNAS-EN 16307-1:2013+A1:2015.

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# EUROPEAN STANDARD 16307-1:2013+A 2015 16307-1:2013+A1

## NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

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#### **English Version**

Industrial trucks - Safety requirements and verification - Part 1: Supplementary requirements for self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burdencarrier trucks

Chariots de manutention - Exigences de sécurité et vérification - Partie 1: Exigences supplémentaires pour les chariots de manutention automoteurs, autres que les chariots sans conducteur, les chariots à portée variable et les chariots transporteurs de charges

Flurförderzeuge - Sicherheitsanforderungen und Verifizierung - Teil 1: Zusätzliche Anforderungen für motorkraftbetriebene Flurförderzeuge mit Ausnahme von fahrerlosen Flurförderzeugen, Staplern mit veränderlicher Reichweite und Lasten- und Personentransportfahrzeugen

This European Standard was approved by CEN on 4 November 2012 and includes Amendment 1 approved by CEN on 20 June 2015.

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 16307-1:2013+A1:2015) has been prepared by Technical Committee CEN/TC 150 "Industrial trucks - Safety", the secretariat of which is held by BSI.

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 2016, and conflicting national standards shall be withdrawn at the latest by January 2016.

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

This document includes Amendment 1 approved by CEN on 20 June 2015.

This document supersedes EN 16307-1:2013.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A].

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(s), see informative Annex ZA, which is an integral part of this document.

This document is based on ISO/TS 3691-7 "Industrial trucks - Safety requirements and verification - Part 7: Regional requirements for countries within the European Community" and is limited to self propelled industrial trucks.

EN 16307 consists of the following parts, under the general title 'Industrial trucks — Safety requirements and verification':

- Part 1: "Supplementary requirements for self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks"
- Part 2: "Supplementary requirements for self-propelled variable-reach trucks"
- Part 3: "Supplementary requirements for trucks with elevating operator position and trucks specifically designed to travel with elevated loads (additional requirements to EN 16307-1)"
- Part 4: "Supplementary requirements for driverless industrial trucks and their systems"
- Part 5: "Supplementary requirements for pedestrian-propelled trucks"
- Part 6: "Supplementary requirements for burden and personnel carriers"

This document is to be used with EN ISO 3691-1 " Industrial trucks — Safety requirements and verification - Part 1: Self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks".

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, 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.

#### 0 Introduction

#### 0.1 General

This document is a type-C standard as stated in EN ISO 12100.

The machines concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

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

The EN 16307 series of standards covers safety requirements and their verification for industrial trucks as defined in ISO 5053 that are not covered exhaustively by EN ISO 3691- series.

#### 0.2 Assessment of hazards

The product needs to be designed in such a way that it is fit for its purpose or function and can be adjusted and maintained without putting persons at risk when used under the conditions foreseen by the manufacturer.

In order to properly design a product and to cover all specific safety requirements, the manufacturer will have to identify the hazards that apply to his product and carry out a risk assessment. The manufacturer will then need to design and construct the product taking this assessment into account.

The aim of this procedure is to eliminate the risk of accidents throughout the foreseeable lifetime of the machinery, including the phases of assembling and dismantling where risks of accidents could also arise from foreseeable abnormal situations.

In selecting the most appropriate methods, the manufacturer will need to apply the following principles, in the order given here:

- a) eliminate or reduce risks as far as possible by design (inherently safe machinery design and construction);
- b) take the necessary protective measures in relation to risks that cannot be eliminated by design;
- c) inform users of any shortcoming of the protective measures adopted;
- d) indicate whether any particular training is required;
- e) specify any need to provide personal protection equipment;
- f) refer to the appropriate user's document for proper operating instructions.

Industrial trucks need to be designed to prevent foreseeable misuse wherever possible, if such would engender risk. In other cases, the instructions will need to draw the user's attention to ways shown by experience in which the machinery ought not be used.

This part of EN 16307 does not repeat all the technical rules which are state-of-the art and which are applicable to the material used to construct the industrial truck. Reference will also need to be made to EN ISO 12100.