



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

## ILNAS-EN 16307-1:2020

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

Chariots de manutention - Exigence de  
sécurité et vérifications - Partie 1 :  
Exigences supplémentaires pour les  
chariots autres que les chariots sans

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

08/2020



## National Foreword

This European Standard EN 16307-1:2020 was adopted as Luxembourgish Standard ILNAS-EN 16307-1:2020.

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ILNAS-EN 16307-1:2020

EUROPEAN STANDARD **EN 16307-1**

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 burden-carrier trucks**

Chariots de manutention - Exigence de sécurité et  
vérifications - Partie 1 : Exigences supplémentaires  
pour les chariots autres que les chariots sans  
conducteur, les chariots à portée variable et les  
chariots porteurs de charge

Sicherheit von Flurförderzeugen -  
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 12 July 2020.

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.

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



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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Contents

Page

European foreword.....	3
Introduction .....	5
1 Scope.....	6
2 Normative references.....	7
3 Terms and definitions .....	8
4 Safety requirements and/or protective measures .....	8
4.1 General.....	8
4.2 Electrical requirements.....	8
4.3 Travel speed.....	9
4.4 Brakes.....	9
4.5 Travel and braking controls - additional operation from alongside pedestrian-controlled and stand-on trucks.....	9
4.6 Lift chains.....	9
4.7 Mast tilt and carriage isolation .....	10
4.8 Operator's seat.....	10
4.9 Protection against crushing, shearing and trapping.....	10
4.10 Loading control.....	10
4.11 Lateral stability.....	10
4.12 Visibility.....	11
4.13 Reduction of noise by design .....	11
4.14 Vibration .....	12
4.15 Electromagnetic radiation.....	12
4.16 Operator restraint system .....	12
5 Verification of safety requirements and/or protective measures .....	12
6 Information for use .....	13
6.1 Instruction handbook(s) .....	13
6.2 Marking.....	13
Annex A (informative) List of significant hazards.....	14
Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered .....	17
Bibliography.....	22

## European foreword

This document (EN 16307-1:2020) 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 February 2021, and conflicting national standards shall be withdrawn at the latest by February 2021.

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 supersedes EN 16307-1:2013+A1:2015.

The main changes with respect to the first edition are as follows:

- a) requirements in respect to visibility (see 4.12) have been changed;
- b) requirements for the operator restraint system (see 4.16) have been added.

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 5: Supplementary requirements for pedestrian-propelled trucks*
- *Part 6: Supplementary requirements for burden and personnel carriers*

This document is intended 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 organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

This document is a type-C standard as stated in EN ISO 12100:2010.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

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 type-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 5053-1 that are not covered exhaustively by the EN ISO 3691 series.

## 1 Scope

This document gives requirements for the types of industrial trucks specified in the scope of EN ISO 3691-1:2015<sup>1)</sup>.

This document is intended to be used in conjunction with EN ISO 3691-1:2015. These requirements are supplementary to those stated in EN ISO 3691-1:2015.

This document deals with the following significant hazards, hazardous situations or hazardous events relevant, when it is used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer:

- electrical requirements;
- noise emissions;
- vibration;
- visibility;
- electromagnetic radiation.

This document defines supplementary requirements to EN ISO 3691-1:2015:

- travel speed;
- brakes;
- travel and braking controls - additional operation from alongside pedestrian-controlled and stand-on trucks;
- lift chains;
- mast tilt and carriage isolation;
- operator's seat;
- operator restraint system;
- protection against crushing, shearing and trapping;
- information for use (instruction handbook and marking).

Annex A (informative) contains the list of significant hazards covered by this document.

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1 ) This document is impacted by the corrigendum EN ISO 3691-1:2015/AC:2016 and the amendment EN ISO 3691-1:2015/A1:2020.