

norm

NEN-EN-ISO 3691-2

Industrial trucks - Safety requirements and verification - Part 2: Self-propelled variable-reach trucks (ISO/DIS 3691-2:2003, IDT)

Publicatie uitsluitend voor commentaar

november 2003
ICS 53.060

Commentaar voor 2004-03-06

Zal vervangen NEN-EN 1459:1999; NEN-EN 1726-1:1999

Als Europees normontwerp is gepubliceerd: prEN ISO 3691-2:2003, IDT

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English version

**Industrial trucks - Safety requirements and verification - Part 2:
Self-propelled variable-reach trucks (ISO/DIS 3691-2:2003)**

Chariots de manutention - Exigences de sécurité et
vérification - Partie 2: Chariots automoteurs à portée
variable (ISO/DIS 3691-2:2003)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 150.

If this draft becomes a European Standard, 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.

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Foreword

This document (prEN ISO 3691-2:2003) has been prepared by Technical Committee ISO/TC 110 "Industrial trucks" in collaboration with Technical Committee CEN/TC 150 "Industrial Trucks - Safety", the secretariat of which is held by BSI.

This document is currently submitted to the parallel Enquiry.

This document will supersede EN 1459:1998 and EN 1726-1:1998.

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.

NOTE FROM CMC The foreword is susceptible to be amended on reception of the German language version. The confirmed or amended foreword, and when appropriate, the normative annex ZB for the references to international publications with their relevant European publications will be circulated with the German version.

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The text of ISO 3691-2:2003 has been approved by CEN as prEN ISO 3691-2:2003 without any modifications.

Annex ZA
(informative)

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Machinery Directive 98/37/EC, amended by Directive 98/79/EC.

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ISO/TC 110/SC 2

Secretariat: BSI

Voting begins on:
2003-11-06

Voting terminates on:
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Industrial trucks — Safety requirements and verification —

Part 2:

Self-propelled variable-reach trucks

Chariots de manutention - Exigences de sécurité et vérification —

Partie 2: Chariots automoteurs à portée variable

(Revision of ISO 3691:1980)

ICS 53.060

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The CEN Secretary-General has advised the ISO Secretary-General that this ISO/DIS covers a subject of interest to European standardization. **In accordance with the ISO-lead mode of collaboration as defined in the Vienna Agreement, consultation on this ISO/DIS has the same effect for CEN members as would a CEN enquiry on a draft European Standard.** Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month FDIS vote in ISO and formal vote in CEN.

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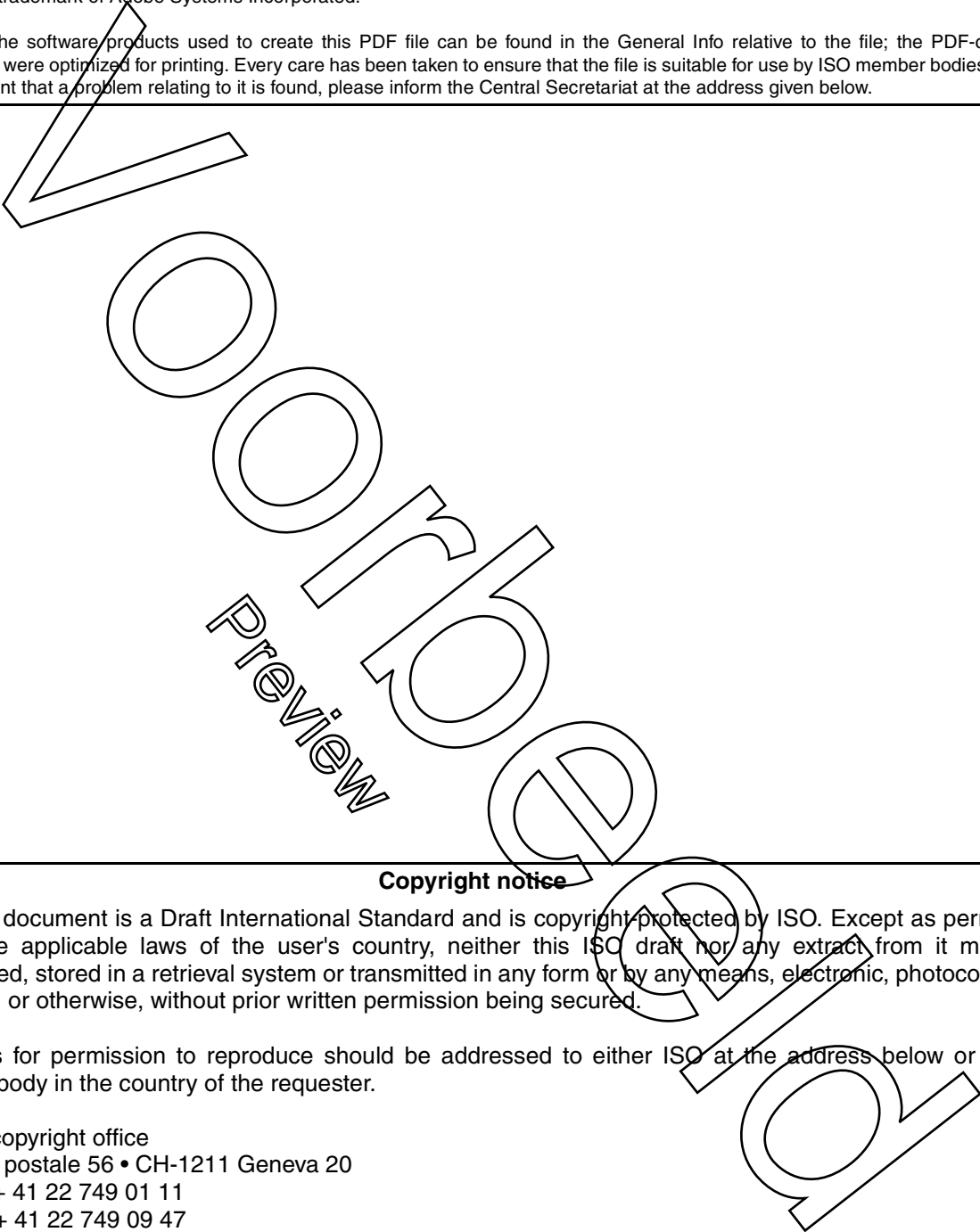
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 3691-2 was prepared by Technical Committee ISO/TC 110, *Industrial trucks*, Subcommittee SC 2, .

This edition cancels and replaces the second edition (ISO 3691:1980), which has been technically revised.

ISO 3691 consists of the following parts, under the general title *Industrial trucks — Safety requirements and verification*:

- *Part 1: Self propelled industrial trucks, other than driverless and variable reach trucks, and burden carriers*
- *Part 2: Self propelled variable reach trucks*
- *Part 3: Additional requirements for trucks with elevating operator position and trucks specifically designed to travel with elevated loads*
- *Part 4: Driverless industrial trucks and their systems*
- *Part 5: Pedestrian propelled trucks*
- *Part 6: Burden and personnel carriers*

Introduction

0.1 General

This International Standard covers safety requirements and verification of industrial trucks as defined in Standard ISO 5053 - Terminology.

For the purpose of this Standard, industrial trucks are wheeled self propelled or manually driven vehicles, except those running on rails. They are either operator controlled or driverless and are designed to carry, tow, push, lift, stack or tier in racks.

0.2 Structure

An important step forward within the work for this standard was the agreement to issue a new structure of International Standards for industrial trucks having on one side basic standards for all kinds of trucks (see Foreword) and on the other side independent standards to cover the respective specific functions of industrial trucks e.g. visibility, noise, vibration, electrical requirements etc.

0.3 Assessment of hazards

The product should 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 it is used under conditions foreseen by the manufacturer.

In order to properly design a product and to cover all specific safety requirements, the manufacturer should identify the hazards that apply to his product and should carry out a risk assessment. He then should design and construct it taking account of this assessment.

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 should apply the following principles in the order given:

- Eliminate or reduce risks as far as possible by design (inherently safe machinery design and construction);
- take the necessary protection measures in relation to risks that can not be eliminated by design;
- inform users of the residual risks due to any shortcoming of the protection measures adopted;
- indicate whether any particular training is required and;
- specify any need to provide personal protection equipment.

The machinery should be designed to prevent abnormal use, wherever possible, if such would engender risk. In other cases the instructions should draw the user's attention to ways – which experience has shown might occur – in which the machinery should not be used.

A list of hazards is given in clause 4 of each part of the standard. The list provides guidance on appropriate measures to protect against the risks involved.

0.4 Legislative situation/Vienna Agreement

From the very beginning, the task of the working group was to revise the standard and to establish world wide basic standards to comply with the major legislative regulations in the world, e.g. EU, USA and Japan.

For several potential problem areas compromises were needed and will be needed in the future.

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Only by these actions there will be the guarantee that products in accordance with the ISO standards could be shipped world wide freely without any technical barriers.

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