

<b>STN</b>	<b>Priemyselné vozíky</b> <b>Požiadavky na bezpečnosť a overovanie</b> <b>Časť 1: Vozíky s vlastným pohonom, s obsluhou,</b> <b>s meniteľným dosahom a vozíky s pevnou</b> <b>plošinou (ISO 3691-1: 2011/Amd 1: 2020)</b>  <b>Zmena A1</b>	<b>STN</b> <b>EN ISO 3691-1/A1</b>  26 8811
------------	--	--

Industrial trucks - Safety requirements and verification - Part 1: Self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks (ISO 3691-1:2011, including Cor 1:2013)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/20

Obsahuje: EN ISO 3691-1:2015/A1:2020, ISO 3691-1:2011/Amd 1:2020

**131330**

EUROPEAN STANDARD

EN ISO 3691-1:2015/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2020

ICS 53.060

English Version

**Industrial trucks - Safety requirements and verification -  
Part 1: Self-propelled industrial trucks, other than  
driverless trucks, variable-reach trucks and burden-carrier  
trucks - Amendment 1 (ISO 3691-1:2011/Amd 1:2020)**

Chariots de manutention - Exigences de sécurité et  
vérification - Partie 1: Chariots de manutention  
automoteurs, autres que les chariots sans conducteur,  
les chariots à portée variable et les chariots  
transporteurs de charges - Amendement 1 (ISO 3691-  
1:2011/Amd 1:2020)

Sicherheit von Flurförderzeugen -  
Sicherheitsanforderungen und Verifizierung - Teil 1:  
Motorkraftbetriebene Flurförderzeuge mit Ausnahme  
von fahrerlosen Flurförderzeugen, Staplern mit  
veränderlicher Reichweite und  
Lastentransportfahrzeugen - Änderung 1 (ISO 3691-  
1:2011/Amd 1:2020)

This amendment A1 modifies the European Standard EN ISO 3691-1:2015; it was approved by CEN on 6 August 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant 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 amendment 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.



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

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

**EN ISO 3691-1:2015/A1:2020 (E)**

<b>Contents</b>	<b>Page</b>
<b>European foreword.....</b>	<b>3</b>
<b>Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered .....</b>	<b>4</b>

## **European foreword**

This document (EN ISO 3691-1:2015/A1:2020) 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 Amendment to the European Standard EN ISO 3691-1:2015 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2020, and conflicting national standards shall be withdrawn at the latest by November 2020.

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

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, 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.

## **Endorsement notice**

The text of ISO 3691-1:2011/Amd 1:2020 has been approved by CEN as EN ISO 3691-1:2015/A1:2020 without any modification.

## Annex ZA (informative)

### Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered

This European Standard has been prepared under a Commission's standardization request "M/396 Mandate to CEN and CENELEC for Standardisation in the field of machinery" to provide one voluntary means of conforming to essential requirements of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast).

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and Annex I of Directive 2006/42/EC**

The relevant Essential Requirements of Directive 2006/42/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
		<i>To cover all the relevant safety requirements for the products(s) in its scope, this standard (providing global requirements and references to regional requirements for a machine) has to be applied together with one of those standards as specified in the scope (providing European regional requirements for a machine).</i>
1.1.2. Principles of safety integration	4.1.1	
1.1.3. Materials and products	4.1.6, 4.5, 4.6.4	
1.1.4. Lighting	4.10.2	
1.1.5. Design of machinery to facilitate its handling	4.9.8, 4.11.5	
1.1.6. Ergonomics	4.7.1, 4.7.2, 4.7.9, 4.11.1, 6.2.4	
1.1.7. Operating positions	4.5.1, 4.11.1	
1.1.8. Seating		not covered

The relevant Essential Requirements of Directive 2006/42/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
1.2.1. Safety and reliability of control systems	4.3.2, 4.3.3, 4.4.2.1, 4.4.2.2, 4.4.2.3, 4.4.2.4, 4.4.2.5, 4.4.2.6, 4.4.3, 4.4.4	
1.2.2. Control devices	4.4.1, 4.4.3, 4.4.4, 6.3.1.4	
1.2.3. Starting	4.2.1, 4.2.2, 4.4.1, 4.4.2.1, 4.4.2.2, 4.4.2.3, 4.4.2.4, 4.4.2.5, 4.4.2.6, 4.4.3, 4.4.4, 4.4.5	
1.2.4.1. Normal stop	4.3.2, 4.3.3, 4.4.2.1, 4.4.2.2, 4.4.2.3, 4.4.2.4	
1.2.4.2. Operational stop		not covered
1.2.5. Selection of control or operating modes	4.4.2.6	
1.2.6. Failure of the power supply	4.3.2, 4.4.3, 4.6.4	
1.3.1. Risk of loss of stability	4.8.2, 4.8.3	
1.3.2. Risk of break-up during operation	4.5, 4.6.2, 4.6.3.3, 4.6.4, 4.6.5, 5.2	
1.3.3. Risks due to falling or ejected objects	4.7.5, 4.9.1, 4.9.2	
1.3.4. Risks due to surfaces, edges or angles	4.1.5	
1.3.5. Risks related to combined machinery	6.3.1.2	
1.3.6. Risks related to variations in operating conditions	4.1.2, 4.1.3,	
1.3.7. Risks related to moving parts	4.5.3.1, 4.7.7.2, 4.7.7.3, 4.7.7.4	
1.3.8.1. Moving transmission parts	4.1.1, 4.7.5.2, 4.7.7.2, 4.7.7.3, 4.7.7.4	
1.3.8.2. Moving parts involved in the process	4.2.1, 4.7.7.2, 4.7.7.3, 4.7.7.4	
1.3.9. Risks of uncontrolled movements	4.2.2, 4.6.3.1, 4.6.3.2, 4.6.3.4	
1.4.1. General requirements		not covered

**EN ISO 3691-1:2015/A1:2020 (E)**

<b>The relevant Essential Requirements of Directive 2006/42/EC</b>	<b>Clause(s)/sub-clause(s) of this EN</b>	<b>Remarks/Notes</b>
1.4.2.1. Fixed guards		not covered
1.4.2.2. Interlocking movable guards		not covered
1.4.2.3. Adjustable guards restricting access		not covered
1.5.1. Electricity supply	4.9.5	
1.5.2. Static electricity		not covered
1.5.3. Energy supply other than electricity	4.5	
1.5.4. Errors of fitting	4.1.6, 4.9.4, 6.2.5	
1.5.5. Extreme temperatures	4.5.1, 4.7.6	
1.5.6. Fire	4.5.1, 4.5.4, 4.11.1	
1.5.7. Explosion	4.5.4, 4.9.5.4	
1.5.8. Noise		not covered
1.5.9. Vibrations		not covered
1.5.10. Radiation		not covered
1.5.11. External radiation		not covered
1.5.12. Laser radiation		not covered
1.5.13. Emissions of hazardous materials and substances	4.5.1, 4.5.2, 4.9.5.5	
1.5.14. Risk of being trapped in a machine	4.11.1.6	
1.5.15. Risk of slipping, tripping or falling	4.7.2, 4.7.3	
1.6.1. Machinery maintenance	4.5.4.3, 4.9.5, 6.2.3, 6.2.5	
1.6.2. Access to operating positions and servicing points	4.5.3, 4.9.5, 6.2.5	

<b>The relevant Essential Requirements of Directive 2006/42/EC</b>	<b>Clause(s)/sub-clause(s) of this EN</b>	<b>Remarks/Notes</b>
1.6.3. Isolation of energy sources	4.1.6, 4.5.4	
1.6.4. Operator intervention	4.4.2.6, 4.7.7.3	
1.7.1. Information and warnings on the machinery	6.3.3, 6.3.4	
1.7.1.1. Information and information devices	6.3.1.4	
1.7.1.2. Warning devices	4.9.3	
1.7.2. Warning of residual risks	6.3.3.4	
1.7.3. Marking of machinery	6.3.1.2, 6.3.1.3, 6.3.3	
1.7.4. Instructions	6.1, 6.3.4	
1.7.4.1. General principles for the drafting of instructions	6.1, 6.2.3, 6.2.4, 6.2.5	
1.7.4.2. Contents of the instructions	6.2.3, 6.2.4, 6.2.5,	
1.7.4.3. Sales literature		not covered
3.2.1. Driving position	4.7.3.5, 4.7.5, 4.7.7.4	
3.2.2. Seating	4.7.8	
3.2.3. Positions for other persons	4.4.1.2	
3.3. Control systems	4.2.1, 4.2.2, 4.4.2.6	
3.3.1. Control devices	4.2.2, 4.4.1, 4.4.2.2, 4.4.2.3, 4.4.2.4, 4.4.2.6	
3.3.2. Starting/moving	4.2.1, 4.2.2	
3.3.3. Travelling function	4.3.2, 4.3.3, 4.4.2.6	
3.3.4. Movement of pedestrian-controlled machinery	4.4.2.4, 4.7.5.2	
3.3.5. Control circuit failure	4.4.3.2	



**EN ISO 3691-1:2015/A1:2020 (E)**

<b>The relevant Essential Requirements of Directive 2006/42/EC</b>	<b>Clause(s)/sub-clause(s) of this EN</b>	<b>Remarks/Notes</b>
3.4.1. Uncontrolled movements	4.8.2, 4.8.3, 5.2	
3.4.2. Moving transmission parts	4.5.3	
3.4.4. Falling objects	4.9.1, 4.9.2	
3.4.5. Means of access	4.7.2	
3.4.6. Towing devices	4.12, 6.3.1.3	
3.5.1. Batteries	4.9.5	
3.5.2. Fire		not covered
3.6.1. Signs, signals and warnings	4.9.3, 6.3.1.2, 6.3.1.4, 6.3.2, 6.3.3, 6.3.5	
3.6.2. Marking	6.3.1.2, 6.3.1.3, 6.3.1.4, 6.3.2, 6.3.3, 6.3.4, 6.3.5	
3.6.3.1. Vibrations		not covered
3.6.3.2. Multiple uses	6.3.1.2	
4.1.2.1. Risks due to lack of stability	4.8.2, 4.8.3	
4.1.2.3. Mechanical strength	5.2	
4.1.2.4. Pulleys, drums, wheels, ropes and chains	4.6.2	
4.1.2.6 a)	4.6.3.2, 4.6.3.3	
4.1.2.6 c)	4.6.2.2, 4.6.3.1, 4.6.3.2, 4.6.3.4	
4.1.2.6 e)	4.4.4.1	
4.1.2.7. Movements of loads during handling		not covered
4.1.3. Fitness for purpose	5.3	
4.2.1. Control of movements	4.2.2.4, 4.4.4.1	

The relevant Essential Requirements of Directive 2006/42/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
4.3.3. Lifting machinery		not covered
4.4.1. Lifting accessories	6.3.1.2	
4.4.2. Lifting machinery	6.2.3, 6.2.4, 6.2.5	
6. SUPPLEMENTARY ESSENTIAL HEALTH AND SAFETY REQUIREMENTS FOR MACHINERY PRESENTING PARTICULAR HAZARDS DUE TO THE LIFTING OF PERSONS		not covered

**WARNING 1** — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2** — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

# INTERNATIONAL STANDARD

# ISO 3691-1

First edition  
2011-09-15

**AMENDMENT 1**  
2020-02

---

---

## **Industrial trucks — Safety requirements and verification —**

### **Part 1: Self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks**

#### **AMENDMENT 1**

*Chariots de manutention — Exigences de sécurité et vérification —*

*Partie 1: Chariots de manutention automoteurs, autres que les  
chariots sans conducteur, les chariots à portée variable et les chariots  
transporteurs de charges*

*AMENDEMENT 1*



Reference number  
ISO 3691-1:2011/Amd.1:2020(E)

© ISO 2020

**ISO 3691-1:2011/Amd.1:2020(E)****COPYRIGHT PROTECTED DOCUMENT**

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Fax: +41 22 749 09 47  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 110, *Industrial trucks*, Subcommittee SC 2, *Safety of powered industrial trucks*.

A list of all parts in the ISO 3691 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**