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Second edition
2021-07

Industrial trucks — Safety requirements and verification —

Part 6: Burden and personnel carriers

*Chariots de manutention — Exigences de sécurité et vérification —
Partie 6: Transporteurs de charges et de personnel*



Reference number
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Contents

| | Page |
|---|-----------|
| Foreword | v |
| Introduction | vi |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 2 |
| 4 Safety requirements and/or protective measures | 3 |
| 4.1 General..... | 3 |
| 4.1.1 Overall requirements..... | 3 |
| 4.1.2 Normal climatic conditions..... | 3 |
| 4.1.3 Electrical requirements..... | 3 |
| 4.1.4 Edges and angles..... | 3 |
| 4.1.5 Stored energy components..... | 3 |
| 4.2 Starting/moving..... | 3 |
| 4.2.1 Unauthorized starting..... | 3 |
| 4.2.2 Unintended movement..... | 3 |
| 4.2.3 Speedometer..... | 4 |
| 4.3 Brakes..... | 4 |
| 4.3.1 General..... | 4 |
| 4.3.2 Stand-on carriers..... | 4 |
| 4.3.3 Failure of the energy supply..... | 4 |
| 4.4 Manual control actuators..... | 5 |
| 4.4.1 General..... | 5 |
| 4.4.2 Travel and braking controls..... | 5 |
| 4.4.3 Steering controls..... | 6 |
| 4.4.4 Marking..... | 6 |
| 4.5 Power systems and accessories..... | 7 |
| 4.5.1 Exhaust and cooling systems..... | 7 |
| 4.5.2 Fuel tank..... | 7 |
| 4.5.3 Access to engine and other compartments..... | 7 |
| 4.5.4 Liquefied petroleum gas (LPG) carriers..... | 7 |
| 4.6 Operator and passenger positions..... | 10 |
| 4.6.1 Dimensions..... | 10 |
| 4.6.2 Compartment floor..... | 11 |
| 4.6.3 Seats..... | 11 |
| 4.6.4 Protection from burning..... | 12 |
| 4.6.5 Protection against crushing, shearing and trapping..... | 12 |
| 4.7 Stability..... | 12 |
| 4.8 Protective devices..... | 12 |
| 4.8.1 Warning device..... | 12 |
| 4.8.2 Devices for towing..... | 12 |
| 4.8.3 Wheels with split wheel rims for inflatable tyres..... | 12 |
| 4.8.4 Battery restraint devices..... | 13 |
| 4.8.5 Traction battery requirements..... | 13 |
| 4.9 Visibility/lighting..... | 13 |
| 4.9.1 Visibility..... | 13 |
| 4.9.2 Lighting..... | 13 |
| 4.10 Environmental conditions..... | 14 |
| 4.10.1 Operator's cab..... | 14 |
| 4.10.2 Noise emissions..... | 14 |
| 4.10.3 Vibration..... | 14 |
| 4.10.4 Electromagnetic compatibility (EMC)..... | 14 |
| 4.11 Transport..... | 15 |
| 4.11.1 Location for lifting and/or slinging points..... | 15 |

This is a preview of "ISO 3691-6:2021". [Click here to purchase the full version from the ANSI store.](#)

| | | |
|------------------------------|---|-----------|
| 4.11.2 | Tie-down points | 15 |
| 4.11.3 | Slinging of removable attachments | 15 |
| 5 | Verification of safety requirements and/or protective measures | 15 |
| 5.1 | General | 15 |
| 5.2 | Functional verification | 15 |
| 6 | Information for use | 16 |
| 6.1 | General | 16 |
| 6.2 | Instruction handbook(s) | 16 |
| 6.2.1 | Concerning the carrier | 16 |
| 6.2.2 | Operation of the carrier | 16 |
| 6.2.3 | Service and maintenance of the carrier | 17 |
| 6.2.4 | Transportation, commissioning and storage | 18 |
| 6.2.5 | Truck modification | 18 |
| 6.3 | Marking | 18 |
| 6.3.1 | Information plates | 18 |
| 6.3.2 | Marking of controls | 19 |
| 6.3.3 | Other information | 19 |
| Annex A (informative) | List of significant hazards | 20 |
| Bibliography | | 25 |

This is a preview of "ISO 3691-6:2021". [Click here to purchase the full version from the ANSI store.](#)

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).

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).

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.

This document was prepared by Technical Committee ISO/TC 110, *Industrial trucks*, Subcommittee SC 2, *Safety of industrial trucks*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 150, *Industrial Trucks – Safety*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 3691-6:2013), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the Introduction has been modified;
- throughout the document, old references to ISO 5053 have been updated to ISO 5053-1 and references to ISO/TS 3691-7 to EN 16307-6;
- in [4.7](#), the stability requirements have been changed to ISO 22915-17;
- in [4.6.3.1](#), the range for weight adjustment of the seat has been changed to "52 kg to 114 kg";
- in [4.6.3.3](#), the requirements for restraints and handholds have been clarified;
- in [6.2.2.1](#), list item t) has been added;
- in [6.2.5](#), the old requirement has been replaced by a reference to regional requirements outside Europe in ISO/TS 3691-8.

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.

Introduction

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

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 organisations, 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);
- consumers (in case of machinery intended for use by consumers).

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

The machinery 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.

This document 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 to ISO 12100 is also necessary.

Structure

An important step forward in the work on the ISO 3691 series 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 and on the other side independent standards to cover the respective specific functions of industrial trucks, e.g. visibility, noise, vibration, electrical requirements, etc.

Global relevance

From the beginning, the task of the working group was to revise ISO 3691:1980 and establish worldwide basic standards to align with the major regulations in, for example, the European Union, Japan, Australia and North America.

Every effort was made to develop a globally relevant International Standard. That goal was achieved with most of the issues. For several potential problem areas, compromises were needed and will be needed in the future. Where divergent regional requirements remain, these are addressed by the EN 16307 series and ISO/TS 3691-8:2019.