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BSI Standards Publication

Rough-terrain trucks — Safety requirements and verification

Part 7: Longitudinal load moment systems



National foreword

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A list of organizations represented on this committee can be obtained on request to its secretary.

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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.

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 on 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 the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 110, *Industrial trucks*, Subcommittee SC 4, *Rough-terrain trucks*.

A list of all parts in ISO 10896 series can be found on the ISO website.

Introduction

This document is one of a set of International Standards produced by ISO/TC 110/SC 4 as part of its program of work regarding standardization of terminology, general safety, performance and user requirements for rough-terrain trucks (hereafter also referred to as trucks).

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

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 -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.

Rough-terrain trucks — Safety requirements and verification —

Part 7:

Longitudinal load moment systems

1 Scope

This document specifies design, safety and verification requirements for longitudinal load moment systems which can be used on rough-terrain trucks (hereafter referred to as trucks). This document provides requirements for both the longitudinal load moment indicator (hereafter referred to as LLMI) and the longitudinal load moment control (hereafter referred to as LLMC) used on rough-terrain trucks, defined in ISO 10896-1, in a stationary position performing loading or placing functions on consolidated, stable and level ground.

It is not applicable to the following:

- lorry-mounted trucks as defined in ISO 20297-1;
- slewing variable-reach trucks as defined in ISO 10896-2.

This document deals with significant hazards, hazardous situations or hazardous events relevant to longitudinal load moment systems when used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer.

This document does not cover the risk due to lateral instability or instability due to the travelling of the truck. The longitudinal load moment system is not intended for warning of the overturning risk while the truck is travelling.

This document is not applicable to longitudinal load moment systems manufactured before the date of its publication.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 10896-1:2012, Rough-terrain trucks — Safety requirements and verification — Part 1: Variable-reach trucks

ISO 12100, Safety of machinery — General principles for design — Risk assessment and risk reduction

ISO 13849-1:2015, Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design

ISO 22915-14:2010, Industrial trucks — Verification of stability — Part 14: Rough-terrain variable-reach trucks

IEC 60529, Degrees of protection provided by enclosures (IP Code)