

MAASTIKUSUUTLIKUD LAADURID. OHUTUSNÕUDED JA
VASTAVUSKONTROLL. OSA 4: TÄIENDAVAD NÕUDED
VABALT RIPPUVAID KOORMAID KÄSITSEVATELE
TELESKOOPLAADURITELE

Rough-terrain trucks - Safety requirements and
verification - Part 4: Additional requirements for
variable-reach trucks handling freely suspended loads

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 1459-4:2020 sisaldab Euroopa standardi EN 1459-4:2020 ingliskeelset teksti.	This Estonian standard EVS-EN 1459-4:2020 consists of the English text of the European standard EN 1459-4:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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ICS 53.060

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English Version

**Rough-terrain trucks - Safety requirements and
verification - Part 4: Additional requirements for variable-
reach trucks handling freely suspended loads**

Chariots tout-terrain - Prescriptions de sécurité et
vérification - Partie 4 : Prescriptions supplémentaires
pour les chariots à portée-variable manutentionnant
des charges suspendues à oscillation libre

Geländegängige Stapler - Sicherheitstechnische
Anforderungen und Verifizierung - Teil 4: Zusätzliche
Anforderungen für Stapler mit veränderlicher
Reichweite zum Befördern angehängter Lasten

This European Standard was approved by CEN on 23 November 2020.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 1459-4:2020) 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of an identical text or by endorsement, at the latest by June 2021, and conflicting national standards shall be withdrawn at the latest by June 2021.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 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 2006/42/EC.

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

EN 1459 consists of the following parts, under the general title Rough-terrain trucks — Safety requirements and verification:

Part 1: Variable-reach trucks;

Part 2: Slewing variable-reach trucks;

Part 3: Interface between the variable-reach truck and the work platform;

Part 4: Additional requirements for variable-reach trucks handling freely suspended loads;

Part 5: Additional requirements for attachments and attachment interface;

Part 6: Application of EN ISO 13849-1 to slewing and non-slewing variable-reach rough-terrain trucks;

Part 8: Variable-reach tractors.

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 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);
- 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.

All quantities are in SI units, and this includes metric units.

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

The machinery concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

1 Scope

This document specifies the safety requirements and means of verification in addition to EN 1459-1:2017+A1:2020 and EN 1459-2:2015+A1:2018 as applicable, for rough-terrain variable-reach trucks (hereafter referred to as trucks) designed and intended for handling suspended loads which can swing freely in one or more directions. It is applicable to trucks covered by EN 1459-1:2017+A1:2020 and EN 1459-2:2015+A1:2018.

This document does not apply to:

- the lifting of suspended loads which by design of the load or the lifting attachments does not allow the load to swing freely in any direction;
- the handling of flexible intermediate bulk containers, as defined in ISO 21898:2004, carried under the forks of the truck or with attachments intended for this purpose;
- any attachments / means used for lifting personnel;
- lifting accessories;
- freight container handling trucks;
- mobile cranes (covered by EN 13000:2010+A1:2014).

This document deals with all significant hazards, hazardous situations or hazardous events, related to trucks handling a freely suspended load, when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see Annex A).

This document does not deal with load limiter for attachments.

This document is not applicable to rough-terrain variable-reach trucks designed and intended for handling suspended loads 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.

EN 1459-1:2017+A1:2020, *Rough-terrain trucks — Safety requirements and verification — Part 1: Variable-reach trucks*

EN 1459-2:2015+A1:2018, *Rough-terrain trucks — Safety requirements and verification — Part 2: Slewing variable-reach trucks*

EN ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)*

ISO 7000:2019, *Graphical symbols for use on equipment — Registered symbols*

ISO 22915-1:2016, *Industrial trucks — Verification of stability — Part 1: General*

ISO 22915-10:2008, *Industrial trucks — Verification of stability — Part 10: Additional stability test for trucks operating in the special condition of stacking with load laterally displaced by powered devices*

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

ISO 22915-20:2008, *Industrial trucks — Verification of stability — Part 20: Additional stability test for trucks operating in the special condition of offset load, offset by utilization*

ISO 22915-24:2015, *Industrial trucks — Verification of stability — Part 24: Slewing variable-reach rough-terrain trucks*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 12100:2010, EN 1459-1:2017+A1:2020 and EN 1459-2:2015+A1:2018 with the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1 lifting attachment

interchangeable equipment mounted to the truck from which a lifting accessory or a load can be suspended

EXAMPLE Jib, hoist

3.2 jib

device, telescopic or not, intended to extend forward the lifting point of the truck

Note 1 to entry: See Figure 1.

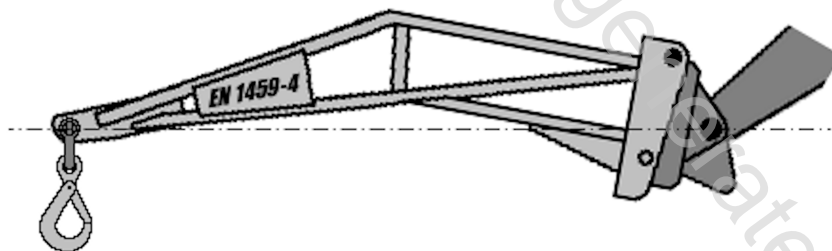


Figure 1 — Example of a jib

3.3 hoist

interchangeable equipment for lifting and lowering suspended loads over predetermined distances, using ropes or chains