



BSI Standards Publication

Rough-terrain trucks — Safety requirements and verification

Part 1: Variable-reach trucks

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National foreword

This British Standard is the UK implementation of EN 1459-1:2025. It supersedes BS EN 1459-1:2017+A1:2020, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MHE/7, Industrial trucks.

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

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EUROPÄISCHE NORM

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English Version

Rough-terrain trucks - Safety requirements and verification - Part 1: Variable-reach trucks

Chariots tout-terrain - Prescriptions de sécurité et vérification - Partie 1 : Chariots à portée variable

Geländegängige Stapler - Sicherheitstechnische Anforderungen und Verifizierung - Teil 1: Stapler mit veränderlicher Reichweite

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European foreword

This document (EN 1459-1:2025) 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of an identical text or by endorsement, at the latest by October 2025, and conflicting national standards shall be withdrawn at the latest by October 2025.

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 supersedes EN 1459-1:2017+A1:2020.

In comparison with the previous edition, the following technical modifications have been made:

- requirements for trucks not fitted with an enclosed cab;
- update of normative references;
- other minor changes, mainly editorial clarifications of existing requirements.

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 suspended loads
- Part 5: Attachment interface
- Part 6: Application of EN ISO 13849-1 to slewing and non-slewing variable-reach rough-terrain truck (technical report)
- Part 8: Variable-reach tractors
- Part 9: Variable-reach trucks equipped with work platforms having a frontguard that can be opened

This document has been prepared under a standardization request given to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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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, Türkiye and the United Kingdom.

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Introduction

This document covers general safety requirements and the means for verification of these requirements for rough-terrain variable-reach trucks.

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

This document is a type C standard as stated in EN ISO 12100:2010.

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.

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.

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1 Scope

This document specifies the safety requirements of self-propelled rough-terrain variable-reach trucks (hereafter referred to as trucks), intended to handle loads, equipped with a telescopic lifting means (pivoted boom), on which a load handling device (e.g. carriage and fork arms) is fitted.

For the purpose of this document, rough-terrain variable-reach trucks are designed to transport, lift and place loads and can be driven on unimproved terrain.

Fork arms are considered to be part of the truck. Trucks can also be equipped with a variety of attachments (e.g. bale spikes, mowers, sweepers).

This document deals with all the significant hazards, hazardous situations and events relevant to the trucks 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 apply to:

- slewing rough-terrain variable-reach trucks covered by EN 1459-2:2015+A1:2018;
- rough-terrain variable-reach tractors covered by CEN/TS 1459-8;
- industrial variable reach trucks covered by EN ISO 3691-2:2023;
- lorry-mounted variable-reach trucks covered by ISO 20297-1:2017;
- variable-reach trucks fitted with tilting or elevating operator position;
- mobile cranes covered by EN 13000:2010+A1:2014;
- machines designed primarily for earth moving, even if their buckets and blades are replaced with forks (see EN 474 series);
- trucks designed primarily with variable length load suspension elements (e.g. chain, ropes) from which the load may swing freely in all directions;
- trucks designed primarily for container handling;
- trucks on tracks;
- trucks with articulated chassis;
- attachments.

Determination and declaration of sound power level is not addressed by this document.

This document does not cover sales literature.

This document does not address hazards linked to:

- operation of the truck from a position other than the normal operating position or the remote control;
- hybrid power systems;
- gas power systems;
- gasoline engine systems;