Irish Standard
I.S. EN 1459-2:2015

Rough-terrain trucks - Safety requirements and verification - Part 2: Slewing variable-reach trucks

I.S. EN 1459-2:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 1459-2:2015 is the adopted Irish version of the European Document EN 1459-2:2015, Rough-terrain trucks - Safety requirements and verification - Part 2: Slewing variable-reach trucks

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1459-2

September 2015

ICS 53.060

English Version

Rough-terrain trucks - Safety requirements and verification - Part 2: Slewing variable-reach trucks

Chariots tout-terrain - Prescriptions de sécurité et vérification - Partie 2 : Chariots à portée variable rotatifs

Geländegängige Stapler - Sicherheitstechnische Anforderungen und Verifizierung - Teil 2: Schwenkbare Stapler mit veränderlicher Reichweite

This European Standard was approved by CEN on 17 July 2015.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

European foreword

This document (EN 1459-2:2015) 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of an identical text or by endorsement, at the latest by March 2016, and conflicting national standards shall be withdrawn at the latest by March 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] 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 relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

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

— *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: Additional requirements for attachments and attachment interface*

— *Part 6: Risk assessment methodology and control system performance level determination* (CEN/TR)

— *Part 7: Test method and determination of noise emission* (in development)

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

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

For the purpose of this European Standard, slewing rough-terrain variable-reach trucks are primarily designed to transport and place loads to elevated work areas and can be driven on unimproved terrain.

Trucks may also be equipped with a variety of attachments, e.g., mower, sweeper.

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

Acknowledging that, at the time of publication, the requirements included in this European Standard do not represent the state of the art, a transition period of 18 months is permitted after the date of publication, such that manufacturers can develop their products sufficiently to meet the requirements of this European Standard.

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 European Standard specifies the general safety requirements of slewing variable-reach rough-terrain trucks (here-after referred to as trucks), consisting of a lower chassis with a slewing upper structure equipped with a telescopic lifting means (pivoted boom), on which a load handling device (e.g. carriage and fork arms) is typically fitted.

Fork arms are covered by this European Standard and considered to be parts of the truck.

This European Standard deals with all 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 European Standard does not apply to:

— variable-reach rough terrain trucks covered by prEN 1459-1 (non-slewing);

— industrial variable-reach trucks (covered by prEN ISO 3691-2);

— lorry-mounted variable-reach trucks;

— variable reach trucks fitted with tilting or elevating operator position;

— mobile cranes (covered by EN 13000);

— machines designed primarily for earth moving, such as loaders and dozers, 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;

— attachments (prEN 1459-5).

This European Standard does not address hazards linked to:

— hybrid power systems;

— gas power system;

— trucks equipped with gasoline engine;

— battery power system;

— tractor specific devices (e.g. PTO).

This European Standard does not address hazards which may occur when:

a) handling suspended loads which may swing freely (additional requirements are given in prEN 1459-4);

b) using trucks on public roads;

c) operating in potentially explosive atmospheres;

d) operating underground;

e) when towing trailers;

f) fitted with a personnel work platform (additional requirements are given in EN 1459-3).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 842:1996+A1:2008, *Safety of machinery — Visual danger signals — General requirements, design and testing*

EN 1175-2:1998+A1:2010, *Safety of industrial trucks — Electrical requirements — Part 2: General requirements of internal combustion engine powered trucks*

EN 12053:2001+A1:2008, *Safety of industrial trucks — Test methods for measuring noise emissions*

EN 12895:2015, *Industrial trucks — Electromagnetic compatibility*

EN 13059:2001+A1:2008, *Safety of industrial trucks — Test methods for measuring vibration*

EN 13309:2010, *Construction machinery — Electromagnetic compatibility of machines with internal power supply*

EN 60529:1991, *Degrees of protection provided by enclosures (IP Code) (IEC 60529)*

EN 62061:2005, *Safety of machinery — Functional safety of safety-related electrical, electronic and programmable electronic control systems (IEC 62061:2003)*

EN ISO 2860:2008, *Earth-moving machinery — Minimum access dimensions (ISO 2860:1992)*

EN ISO 2867:2011, *Earth-moving machinery — Access systems (ISO 2867:2011)*

EN ISO 3164:2013, *Earth-moving machinery — Laboratory evaluations of protective structures — Specifications for deflection-limiting volume (ISO 3164:2013)*

EN ISO 3411:2007, *Earth-moving machinery — Physical dimensions of operators and minimum operator space envelope (ISO 3411:2007)*

EN ISO 3449:2008, *Earth-moving machinery — Falling-object protective structures — Laboratory tests and performance requirements (ISO 3449:2005)*

EN ISO 3457:2008, *Earth-moving machinery — Guards — Definitions and requirements (ISO 3457:2003)*

EN ISO 3471:2008, *Earth-moving machinery — Roll-over protective structures — Laboratory tests and performance requirements (ISO 3471:2008)*

EN ISO 4413:2010, *Hydraulic fluid power — General rules and safety requirements for systems and their components (ISO 4413:2010)*

EN ISO 4414:2010, *Pneumatic fluid power — General rules and safety requirements for systems and their components (ISO 4414:2010)*