AS 10896.1:2019

Australian STANDARD

Rough-terrain trucks — Safety requirements and verification

Part 1: Variable-reach trucks (ISO 10896-1:2012, MOD)

STANDARDS Australia

AS 10896.1:2019

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Australian Industrial Truck Association
Australian Industry Group
Australian Institute for Health and Safety
Construction and Mining Equipment Industry Group
Hire and Rental Industry Association of Australia
National Road Transport Association
SafeWork NSW
Telescopic Handler Association of Australia
WorkSafe Victoria

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First published as AS 1418.19—2007.
Revised and redesignated as AS 10896.1:2019.

Preface

This Standard was prepared by the Standards Australia Committee ME-026, Industrial Trucks to supersede AS 1418.19—2007, *Cranes, hoists and winches, Part 19: Telescopic handlers.*

The objective of this Standard is to provide requirements for rough terrain self-propelled variable reach trucks that are intended to handle loads with forks and different types of attachments.

Variable reach trucks are known by a variety of terms, including "telehandlers", "multi-purpose handlers" and "telescopic handlers".

As part of the changes from the previous design standard for variable reach trucks there is a change in terminology. "Maximum capacity" has been changed to "rated capacity" and what was previously known as "rated capacity" will now be known as "actual capacity".

This Standard is an adoption with national modifications, and has been reproduced from, ISO 10896-1:2012, *Rough-terrain trucks — Safety requirements and verification — Part 1: Variable-reach trucks*. Appendix ZZ lists the variations to ISO 10896-1:2012 for the application of this Standard in Australia.

Requirements covering some content, for items such as freely suspended loads, are set out in ISO Standards other than ISO 10896-1. Committee ME-026 has determined to provide these requirements in Appendix ZZ.

Committee ME-026 set out to revise AS 1418.19, and in doing so reviewed ISO 10896-1. It was determined that ISO 10896-1 contained many of the necessary requirements to cover the scope of AS 1418.19 and as such it was agreed to adopt ISO 10896-1 to align internationally.

As this document has been reproduced from an International Standard, the following applies:

(a) In the source text "this part of ISO 10896" should read "this Australian Standard".

(b) A full point substitutes for a comma when referring to a decimal marker.

Any clauses in Appendix ZZ of this Standard that are additional to the requirements of ISO 10896-1 are numbered beginning from 101 (except for additional definitions, which begin from 201). For example, additional clauses in Section 4, Requirements, are numbered 4.101, 4.102 etc and additional definitions are numbered 3.201, 3.202 etc.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms "normative" and "informative" are used in Standards to define the application of the appendix or annex to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.

Contents

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 10896-1 was prepared by Technical Committee ISO/TC 110, *Industrial trucks*, *Subcommittee SC 4, Rough-terrain trucks*.

ISO 10896 consists of the following parts, under the general title Rough-terrain trucks — Safety requirements and verification:

— *Part 1: Variable-reach trucks*

Slewing trucks, lorry-mounted trucks, freely swinging load and straight-masted trucks are to form the subjects of future parts 2, 3, 4 and 5.

Introduction

Variable-reach trucks are known by a variety of terms, including “telehandlers” and “multi-purpose handlers”.

The variable-reach rough-terrain trucks covered by this part of ISO 10896 are designed to transport loads to and place them on elevated work areas and can be driven on unimproved or disturbed terrain.

They can also be equipped with a variety of attachments (e.g. fork arms, bale spikes) and interchangeable equipment (e.g. mowers, sweepers).

Australian Standard®

Rough-terrain trucks — Safety requirements and verification

Part 1: Variable-reach trucks (ISO 10896-1:2012, MOD)

1 Scope

This part of ISO 10896 specifies general safety requirements for non-slewing, variable-reach rough-terrain trucks (hereafter known as "trucks"), with an articulated or rigid chassis and equipped with a telescopic lifting means (pivoting boom) on which a load-handling device such as a carriage with fork arms is typically fitted. Fork arms and other integrated attachments are considered to be parts of the truck.

Other standards, in addition to the relevant provisions of this part of ISO 10896, can apply to the attachments.

This part of ISO 10896 is not applicable to the following:

a) industrial variable-reach trucks covered by ISO 3691-2;

b) machines designed primarily for earth-moving, such as loaders even if their buckets are replaced by fork arms (see ISO 20474);

c) trucks designed primarily with variable-length load suspension elements (e.g. chain, ropes) from which the load may swing freely in all directions (mobile cranes)[1];

d) trucks fitted with personnel/work platforms, designed to move persons to elevated working positions[2];

e) trucks designed primarily for container handling.

The significant hazards covered by this part of ISO 10896 are listed in Annex A. This part of ISO 10896 does not address hazards that can occur

— during manufacture,

— when handling suspended loads, which may swing freely,

— when using trucks on public roads,

— when operating in potentially explosive atmospheres, or

— with a battery, LPG or hybrid as the primary power source.

2 Normative references

The following referenced documents are indispensable for the application 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 2330, *Fork-lift trucks — Fork arms — Technical characteristics and testing*

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

ISO 3449, *Earth-moving machinery — Falling-object protective structures — Laboratory tests and performance requirements*

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1) Additional requirements for trucks intended for freely swinging load applications, their lifting devices and attachments, and personnel/work platform applications on trucks, are being developed by ISO/TC 110/SC4.