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Australian STANDARD®

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Mobile elevating work platforms — Operator's controls — Actuation, displacement, location and method of operation (ISO 21455:2020, MOD)



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Office of Industrial Relations, Qld
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The Crane Industry Council of Australia
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Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-005, Cranes.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this document as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this document is to specify the performance requirements, location, marking and method of operation related to operator's controls on mobile elevating work platforms (hereafter referred to as MEWPs). The document takes into account operator safety ergonomics. It applies to all controls used by an operator and includes provisions for finger-, thumb-, hand-, and foot-operated controls.

This document is an adoption with national modifications, and has been reproduced from, ISO 21455:2020, *Mobile elevating work platforms — Operator's controls — Actuation, displacement, location and method of operation*. The modifications are additional requirements and are set out in Appendix ZZ, which has been added at the end of the source text.

Appendix ZZ lists the modifications to ISO 21455:2020, for the application of this document in Australia.

As this document has been reproduced from an International document, a full point substitutes for a comma when referring to a decimal marker.

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 appendices or annexes 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.

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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 of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 214, *Elevating work platforms*.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This corrected version of ISO 21455:2020 corrects the value for the width of joystick grip hand in Table 3.

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Introduction

This document has been developed to provide methods of operation and requirements for operator's controls on mobile elevating work platforms. These provisions have been derived from experience, current practice, human factors literature and existing standards.

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NOTES

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Mobile elevating work platforms — Operator's controls — Actuation, displacement, location and method of operation (ISO 21455:2020, MOD)

1 Scope

This document specifies the performance requirements, location, marking and method of operation related to operator's controls on mobile elevating work platforms (hereafter referred to as MEWPs) and takes into account operator safety and ergonomics.

It applies to all controls used by an operator and includes provisions for finger, thumb, hand, and foot operated controls.

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 16368, *Mobile elevating work platforms — Design, calculations, safety requirements and test methods*

ISO 20381, *Mobile elevating work platforms — Symbols for operator controls and other displays*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 16368 and the following apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
control
device actuated by an operator to affect a response from the MEWP

3.1.1
primary control
control (3.1) used by the operator for travelling or movement of the extending structure

3.1.2
secondary control
any *control* (3.1) of the MEWP other than a *primary control* (3.1.1)

3.1.3
multi-functional control
control (3.1) which is capable of providing two or more functions simultaneously

Note 1 to entry: A multi-functional control can also be a *multi-purpose control* (3.1.4).

EXAMPLE A combination of steering and travel, or a combination of slewing and boom elevation.

3.1.4
multi-purpose control
control which, depending on the mode selected, provides separate and distinct functions using the same actuating movement

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