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Second edition
2021-10

Mobile elevating work platforms — Design, calculations, safety requirements and test methods relative to special features —

Part 2: MEWPs with non-conductive (insulating) components

*Plates-formes élévatrices mobiles de personnel — Conception,
calculs, exigences de sécurité et méthodes d'essai concernant les
caractéristiques spéciales —*

Partie 2: PEMP avec composants non conducteurs (isolants)



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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).

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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*.

This second edition cancels and replaces the first edition (ISO 16653-2:2009), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the limitation of applicability to 46 kV and below has been clarified in the Scope;
- the normative references have been updated;
- the hazard list has been moved to [Annex A](#);
- in [Clause 4](#), the bursting safety factors have been aligned with ISO 16368;
- in [Clause 4](#), the requirements for vacuum flashover have been removed and the work platform requirements have been clarified and re-organized;
- in [Clause 5](#), general requirements for examination and test have been added;
- [Table 1](#) and [Table 2](#) have been updated.

A list of all parts in the ISO 16653 series can be found on the ISO website.

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.

Introduction

The object of this document is to define rules for safeguarding persons and objects against the risk of accident associated with the operation of special-application mobile elevating work platforms (MEWPs).

This document does not repeat all the general technical rules applicable to every electrical, mechanical or structural component.

The safety requirements of this document have been drawn up on the basis that MEWPs are periodically maintained according to the manufacturer's instructions, working conditions, frequency of use and applicable regulations.

It is assumed that MEWPs will be checked for proper function daily before start of work and that the MEWP will not be put into operation unless all required controls and safety devices are available and in working order. If a MEWP is seldom used, the checks may be made before start of work.

Where, for clarity, an example of a safety measure is given in the text, the example is intended as a possible solution. Any other safety measure solution leading to an equivalent level of safety is permissible.