

SVENSK STANDARD

SS-ISO 18893:2014



Fastställt/Approved: 2014-06-04
Publicerad/Published: 2014-06-04
Utgåva/Edition: 2
Språk/Language: engelska/English
ICS: 53.020.99

Mobila arbetsplattformar – Säkerhetsprinciper, kontroll, underhåll och drift (ISO 18893:2014, IDT)

Mobile elevating work platforms – Safety principles, inspection, maintenance and operation (ISO 18893:2014, IDT)

This preview is downloaded from www.sis.se. Buy the entire standard via <https://www.sis.se/std-102101>

Standarder får världen att fungera

SIS (Swedish Standards Institute) är en fristående ideell förening med medlemmar från både privat och offentlig sektor. Vi är en del av det europeiska och globala nätverk som utarbetar internationella standarder. Standarder är dokumenterad kunskap utvecklad av framstående aktörer inom industri, näringsliv och samhälle och befrämjar handel över gränser, bidrar till att processer och produkter blir säkrare samt effektiviserar din verksamhet.

Delta och påverka

Som medlem i SIS har du möjlighet att påverka framtida standarder inom ditt område på nationell, europeisk och global nivå. Du får samtidigt tillgång till tidig information om utvecklingen inom din bransch.

Ta del av det färdiga arbetet

Vi erbjuder våra kunder allt som rör standarder och deras tillämpning. Hos oss kan du köpa alla publikationer du behöver – allt från enskilda standarder, tekniska rapporter och standardpaket till handböcker och onlinetjänster. Genom vår webbtjänst e-nav får du tillgång till ett lättnavigerat bibliotek där alla standarder som är aktuella för ditt företag finns tillgängliga. Standarder och handböcker är källor till kunskap. Vi säljer dem.

Utveckla din kompetens och lyckas bättre i ditt arbete

Hos SIS kan du gå öppna eller företagsinterna utbildningar kring innehåll och tillämpning av standarder. Genom vår närhet till den internationella utvecklingen och ISO får du rätt kunskap i rätt tid, direkt från källan. Med vår kunskap om standarders möjligheter hjälper vi våra kunder att skapa verklig nytta och lönsamhet i sina verksamheter.

Vill du veta mer om SIS eller hur standarder kan effektivisera din verksamhet är du välkommen in på www.sis.se eller ta kontakt med oss på tel 08-555 523 00.



Standards make the world go round

SIS (Swedish Standards Institute) is an independent non-profit organisation with members from both the private and public sectors. We are part of the European and global network that draws up international standards. Standards consist of documented knowledge developed by prominent actors within the industry, business world and society. They promote cross-border trade, they help to make processes and products safer and they streamline your organisation.

Take part and have influence

As a member of SIS you will have the possibility to participate in standardization activities on national, European and global level. The membership in SIS will give you the opportunity to influence future standards and gain access to early stage information about developments within your field.

Get to know the finished work

We offer our customers everything in connection with standards and their application. You can purchase all the publications you need from us - everything from individual standards, technical reports and standard packages through to manuals and online services. Our web service e-nav gives you access to an easy-to-navigate library where all standards that are relevant to your company are available. Standards and manuals are sources of knowledge. We sell them.

Increase understanding and improve perception

With SIS you can undergo either shared or in-house training in the content and application of standards. Thanks to our proximity to international development and ISO you receive the right knowledge at the right time, direct from the source. With our knowledge about the potential of standards, we assist our customers in creating tangible benefit and profitability in their organisations.

If you want to know more about SIS, or how standards can streamline your organisation, please visit www.sis.se or contact us on phone +46 (0)8-555 523 00



Den internationella standarden ISO 18893:2014 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av ISO 18893:2014.

Denna standard ersätter SS-ISO 18893:2004, utgåva 1.

The International Standard ISO 18893:2014 has the status of a Swedish Standard. This document contains the official version of ISO 18893:2014.

This standard supersedes the Swedish Standard SS-ISO 18893:2004, edition 1.

Nationell anmärkning: I Sverige krävs enligt Arbetsmiljöverkets föreskrifter AFS 2003:6 BESIKTNING AV LYFTANORDNINGAR OCH VISSA ANDRA TEKNISKA LYFTANORDNINGAR årlig besiktning utförd av ackrediterat organ.

© Copyright/Upphovsrätten till denna produkt tillhör SIS, Swedish Standards Institute, Stockholm, Sverige. Användningen av denna produkt regleras av slutanvändarlicensen som återfinns i denna produkt, se standardens sista sidor.

© Copyright SIS, Swedish Standards Institute, Stockholm, Sweden. All rights reserved. The use of this product is governed by the end-user licence for this product. You will find the licence in the end of this document.

Upplysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna upplysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

Denna standard är framtagen av kommittén för Lyftplattformar, SIS/TK 267.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General requirements	2
4.1 Basic principles.....	2
4.2 System of work.....	3
4.3 Manuals (handbooks).....	3
4.4 Record retention.....	4
4.5 Modifications.....	4
5 Maintenance	4
5.1 Preventive maintenance.....	4
5.2 Maintenance inspections.....	4
5.3 Maintenance personnel training.....	6
5.4 Maintenance and repair safety precautions.....	6
5.5 Replacement parts.....	7
5.6 Manufacturer's safety bulletins.....	7
6 Operation	7
6.1 Planning.....	7
6.2 Operator training.....	9
6.3 Familiarization.....	9
6.4 Assistance to operators.....	9
6.5 Before operation.....	9
6.6 Work place inspection.....	10
6.7 Understanding of hazardous locations.....	10
6.8 Specific requirements of operation.....	10
Annex A (informative) Pictograms of MEWP misuse	18
Bibliography	24

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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 214, *Elevating work platforms*.

This second edition cancels and replaces the first edition (ISO 18893:2004), which has been technically revised.

Introduction

This International Standard is one of a series of standards produced by ISO/TC 214 as part of its program of work regarding standardization of terminology, ratings, general principles (technical performance requirements and risk assessment), safety requirements, test methods, maintenance, and operation for elevating work platforms used to raise (elevate) and position personnel (and related work tools and materials).

Mobile elevating work platforms (MEWPs) are machines/devices which provide protection from falling when working at height.

The entities with responsibilities related to safe use of a MEWP are established by law in some countries. This International Standard provides guidance in the identification of those responsible.

The responsibility for safe operation of a MEWP lies with employers, managers, supervisors, operators, and others using these machines/devices. This International Standard provides requirements so that appropriate MEWPs are selected for use and positioned, used, maintained, and examined for safe use.

The safe operation of a MEWP requires the use of competent authorized persons and trained operators (see ISO 18878).

Mobile elevating work platforms — Safety principles, inspection, maintenance and operation

1 Scope

This International Standard applies to all mobile elevating work platforms (MEWPs) that are intended to position persons, tools and materials and which, as a minimum, consists of a work platform with controls, an extending structure and a chassis.

The technical safety requirements of this International Standard apply except where national or local regulations are more stringent.

For related information, see ISO 16368.

This International Standard applies to MEWPs to achieve the following objectives:

- a) prevention of personal injuries, property damage, and accidents;
- b) establishment of criteria for inspection, maintenance, and operation.

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.

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

ISO 18878, *Mobile elevating work platforms — Operator (driver) training*

IEC/TS 61813, *Live working — Care, maintenance and in-service testing of aerial devices with insulating booms*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 16368 and ISO 18878 and the following apply.

3.1

authorized person

person approved or assigned to perform a specific type of duty or duties at a specific location or locations at a work site

3.2

configuration

all positions in which a MEWP, chassis, extending structure, or work platform can be placed within intended operating limits, including creating variable rated loads

3.3

working envelope

space in which a work platform is designed to work within the specified loads and forces, under normal operation conditions

Note 1 to entry: A MEWP can have more than one working envelope.

**3.4
delivery**

transfer of custody, care, and control of a MEWP from a person or entity to another person or entity

**3.5
maintenance**

act of upkeep such as inspection, lubrication, refuelling, cleaning, adjustment, and scheduled parts replacement

**3.6
modification**

change(s) or addition(s) to a MEWP as originally manufactured which affects the operation, stability, safety factors, rated load, or safety of the MEWP

**3.7
operation**

performance of functions of a MEWP within the scope of its specifications and in accordance with the manufacturer's instructions, work rules, and applicable governmental regulations

**3.8
operator**

person who controls the operation of a MEWP

**3.9
repair**

act of restoring to good condition that which has been broken, damaged, or worn due to use, abuse, or other reasons

**3.10
qualified person**

person who, by possession of a recognized degree, certificate, or professional standing, or by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work, or the project

**3.11
safety-related bulletin**

publication from the manufacturer of a MEWP that requires attention to ensure safe operation of the MEWP

**3.12
stable**

condition wherein the MEWP does not overturn, described technically as the condition in which the sum of the moments acting to overturn a MEWP is less than the sum of the moments tending to resist overturning

4 General requirements

4.1 Basic principles

The information in this International Standard shall be supplemented by good job management, safety control, and the application of sound principles of safety, training, inspection, maintenance, repair, application, and operation. All data available regarding the parameters of intended use and expected environment shall be considered. Those with direct control over the application and operation of MEWPs shall be responsible for the conformance with good safety practices. Decisions on the use and operation of the MEWPs shall always be made with due consideration for the fact that the machine will be carrying persons whose safety is dependent on those decisions as well as others in the operating vicinity.

The operation of any MEWP is subject to certain hazards that can be protected against only by the exercise of intelligence, care, and common sense and not by any device. It is essential to have qualified,

careful persons trained (see ISO 18878) in the intended use, safe operation, maintenance, and service of this type of equipment.

The operation of any MEWP used for working on energized conductors shall conform to the requirements of this International Standard and the requirements of IEC/TS 61813.

It is an essential requirement that:

- a) the selection, positioning, operation, maintenance, and frequent and annual inspections of a MEWP are properly planned, appropriately supervised, and carried out in a safe manner;
- b) having identified the hazards associated with the use of a MEWP, the qualified person evaluates the risks associated with these hazards and puts appropriate control measures in place as identified during the evaluation;
- c) all MEWP operators be trained in accordance with ISO 18878;
- d) all MEWP maintenance work be performed by a qualified person; and
- e) all MEWP repair work shall be performed by a qualified person.

4.2 System of work

The system of work shall be created by the employer or user and shall include the following:

- a) planning of the operation, including procedures for the recovery of persons and/or the machine in the event of an emergency (see [6.1.2.8](#));
- b) selection, provision, and use of a suitable MEWP and work equipment associated with it;
- c) preparation and maintenance of the site, as required, for use of the MEWP;
- d) MEWP maintenance, including inspection(s) and repairs as recommended by the manufacturer;
- e) properly trained personnel authorized to operate the MEWP;
- f) prior to the start of work, familiarization of the MEWP operator with the specific machine to be used, including any local site requirements, warning of the hazards in the areas where the MEWP will be operated;
- g) monitoring of the performance and supervision of the work of the operator to ensure compliance with provisions of this International Standard;
- h) prevention of unauthorized use of the MEWP;
- i) safety of persons not involved in the operation of the MEWP; and
- j) documentation of activities required by this International Standard.

4.3 Manuals (handbooks)

The manufacturer's information which is intended to be readily available and which is necessary for the operation and daily inspection/maintenance of the MEWP shall be provided with each rental, lease, or sale delivery. The manufacturer's maintenance information shall be made available for use by trained personnel of the entity responsible for maintaining the MEWP.

The user/employer shall make sure that the operator is capable of reading and understanding the manuals (handbooks) provided by the manufacturer.

In case the manufacturer no longer exists, and the manufacturer's manuals (handbooks) are not available from other sources, the replacement manuals (handbooks) shall be provided by a qualified person.