INTERNATIONAL STANDARD

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Mobile elevating work platforms — Operator (driver) training

Plates-formes élévatrices mobiles de personnes — Formation des opérateurs (conducteurs)

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Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Safe use of the MEWP 1

5 Requirements to train and authorize operator 2
5.1 Authorization to operate 2
5.2 Responsibility to train 2

6 Contents of training 2
6.1 Primary training 2
6.2 Familiarization 3

7 Administration of training 3
7.1 Qualified trainer 3
7.2 Competency 3
7.3 Record keeping 3
7.4 Training/retraining 3
7.5 Examination/re-examination 4
7.6 Auditing 4

Annex A (informative) **Theoretical Knowledge Evaluation Sheet — Example** 5

Annex B (informative) **Practical Knowledge Evaluation Test for Type 1 MEWPs — Example** 6

Annex C (informative) **Practical Knowledge Evaluation Test for Type 2 MEWPs — Example** 7

Annex D (informative) **Practical Knowledge Evaluation Test for Type 3 MEWPs — Example** 9

Annex E (informative) **MEWP Operator Certificates — Examples** 11

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 18878 was prepared by Technical Committee ISO/TC 214, *Elevating work platforms*.

Introduction

This International Standard is one of a series of standards produced by ISO/TC 214 regarding standardization of terminology and general principles for training operators (drivers) of elevating work platforms used to raise (elevate) and position personnel (and related work tools and materials) to a work position where a work task is to be performed. It is intended that each local jurisdiction use this International Standard to develop detailed training requirements particular to the local conditions.

Mobile elevating work platforms — Operator (driver) training

1 Scope

This International Standard provides methods to prepare training materials and to administer training to operators (drivers) of Mobile Elevating Work Platforms (hereafter known as MEWPs).

It is applicable to MEWPs, as defined in ISO 16368, which are intended to move persons to positions where they can carry out work from the work platform.

NOTE If national regulations are more stringent, they take precedence over the requirements of this International Standard.

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

ISO 18893, *Mobile elevating work platforms — Safety principles, inspection, maintenance and operation*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 16368, ISO 18893 and the following apply.

3.1
trainer
qualified person who conducts the training of the MEWP operator

3.2
examiner
qualified person who tests the competency of the trainee

3.3
familiarization
demonstration of the control functions, safety devices and specific features of a particular model of MEWP to a trained operator

4 Safe use of the MEWP

This International Standard shall be used in conjunction with ISO 18893, which is focused on safe use of MEWPs in all its aspects, not merely operator training.

5 Requirements to train and authorize operator

5.1 Authorization to operate

Only properly trained and authorized personnel shall operate a MEWP.

5.2 Responsibility to train

The custodian of the MEWP is responsible for either training the operator or seeing that the operator is trained or having proof that the operator has been trained in accordance with this International Standard.

6 Contents of training

6.1 Primary training

The operator shall be trained on the following subjects:

a) selection of an appropriate MEWP;

b) purpose and use of operator's manuals, warnings and instructions and custodian's safety rules;

c) pre-start inspection (see ISO 18893);

d) factors affecting stability (see ISO 18893);

e) common hazards and their avoidance (see ISO 18893);

f) workplace inspection (see ISO 18893);

g) general knowledge of the intended purpose and function of all MEWP controls, including emergency controls;

h) use of personal protective equipment appropriate to the task, worksite and environment;

i) safe travelling;

j) transport (if appropriate);

k) securing the MEWP from unauthorized use;

l) use of a malfunctioning MEWP;

m) actual operation of the MEWP.

Under the direction of a qualified person, the trainee shall operate the MEWP for a sufficient period of time to demonstrate proficiency in the actual operation of the MEWP.

NOTE Local conditions may require that other subjects be added.

6.2 Familiarization

Before being authorized to operate a particular make or model MEWP, the operator shall be familiarized by a qualified person on the following:

a) the manufacturer's warnings and instructions;

b) the control functions specific to the particular MEWP;

c) the function of each safety device specific to the particular MEWP.

7 Administration of training

7.1 Qualified trainer

The trainer shall be a qualified person, as defined in ISO 18893.

7.2 Competency

To demonstrate competency, a trainee shall show proficiency in both theory and practice to the examiner.

7.3 Record keeping

Records of the person(s) trained in the operation of a MEWP shall be retained, and:

a) the successful trainee shall be furnished proof of training certifying compliance with this International Standard (see Annexes A through E);

b) shall reflect the period of time the training is valid;

c) shall include the name of the entity providing training or retraining, the name of trainer(s) and examiner(s), clear identification of the MEWPs covered by training, and the date of training;

d) these records shall be retained for at least the period of time the training is valid.

7.4 Training/retraining

The custodian shall ensure that the operator is trained or retrained as necessary to keep the level of competency at an acceptable level.

Examples of situations when retraining is necessary include, but are not limited to:

a) expiration of valid training period,

b) deterioration of performance,

c) extended period of time with no operation of MEWP,

d) new MEWP technologies.

7.5 Examination/re-examination

The custodian shall ensure that the operator is examined or re-examined to evaluate the level of competency.

Examples of situations when examination/re-examination is necessary include, but are not limited to:

a) following training or retraining,

b) expiration of valid training period.

7.6 Auditing

A periodic audit of the training, examination and record-keeping processes should be performed to ensure that an acceptable level of quality is maintained.

Annex A
(informative)

Theoretical Knowledge Evaluation Sheet — Example

ALL TYPES OF MEWPS

Date: _____

OBSERVATIONS

Name of examiner: _____

Name of candidate: _____

The trainee is capable of: _____

Mark if acceptable

PUBLIC SAFETY	Know the manufacturer's obligations	
REGULATIONS, STANDARDS AND TEXTS	Know the employer's obligations (training, issuing of the authorization to drive) and the driver's responsibility	
CLASSIFICATION	Know MEWP classifications by category	
TECHNOLOGY	Know the technology of the different elements of the MEWP	
CHARACTERISTICS	As a function of the different categories of MEWP, able to identify the characteristics of each category, the common uses, the advantages and disadvantages	
SAFETY	Know the main hazards: overturning (wind, nature of the ground, work-platform load) falling, impact, etc.	
	Know the rules for minimizing the risks of electrocution	
	Know how to determine load restrictions	
	Know the rules for driving, travelling and parking and protection against unauthorized use	
	Know how to choose a MEWP depending on the nominal load, working height, nature of work	
	Know the rules for stability and use	
	Know the safety devices and common checks and maintenance to be carried out	
	Know the orders and movements linked to use of emergency controls	
	Know the function and use of manuals, decals and placards	
	Know how to carry out a pre-start inspection	
	Know how to carry out a work-site inspection	

Annex B
(informative)

Practical Knowledge Evaluation Test for Type 1 MEWPs — Example

TYPE 1 MEWPs

Date: _____

OBSERVATIONS

Name of examiner: _____

Name of candidate: _____

The trainee is capable of: _____

Mark if acceptable

		Vertical axis	Work platform movement	
SUITABILITY	Carry out the suitability examination	X	X	
VERIFICATION	Visually check the condition of the MEWP	X	X	
	Verify that the safety devices operate correctly	X	X	
POSITIONING	Interpret and execute the command and communication gestures	X	X	
	Position the unit at a location	X	X	
	Bring the MEWP into service	X	X	
	Set up the markers and signs	X	X	
	Adjust the stabilizers	X	X	
	Set the MEWP horizontal	X	X	
	Position the work platform along a flat vertical surface	X	X	
	Move the work platform along a flat vertical surface	X	X	
	Position the work platform above a flat surface	X	X	
	Move the work platform across this surface	X	X	
	Position the work platform below a flat surface	X	X	
	Move the work platform across this surface		X	
	Position the work platform in a restricted space		X	
	Put the MEWP into the transport position	X	X	
	Smoothness of the manœuvres	X	X	
	Accuracy of the manœuvres	X	X	
EMERGENCY	Perform recovery manœuvres	X	X	
	Perform rescue manœuvres (from the ground position)	X	X	

Annex C
(informative)

Practical Knowledge Evaluation Test for Type 2 MEWPs — Example

TYPE 2 MEWPs — SECTION 1

Date: _____

OBSERVATIONS

Name of examiner: _____

Name of candidate: _____

The trainee is capable of: _____

Mark if acceptable

		Vertical axis	Work platform movement	
SUITABILITY	Carry out the suitability examination	X	X	
VERIFICATION	Visually check the condition of the MEWP	X	X	
	Verify that the safety devices operate correctly	X	X	
POSITIONING	Guide the driver of the vehicle (Interpret and execute the command and communication gestures)	X	X	
	Get someone else to position the vehicle	X	X	
	Position the platform along a flat vertical surface	X	X	
	Move the platform along a flat vertical surface	X	X	
	Position the platform above a flat surface		X	
	Move the platform across this surface		X	
	Position the platform below a flat surface	X	X	
	Move the platform across this surface		X	
	Position the platform in a restricted space	X	X	
	Behaviour in the event of an inclination warning	X	X	
	Put the MEWP into the transport position	X	X	
	Smoothness of the manœuvres	X	X	
	Accuracy of the manœuvres	X	X	
EMERGENCY	Perform recovery manœuvres	X	X	
	Perform rescue manœuvres (from the ground position)	X	X	

TYPE 2 MEWPs — SECTION 2

Date: _____

OBSERVATIONS

Name of examiner: _____

Name of candidate: _____

The trainee is capable of: _____

Mark if acceptable

			Vertical axis	Work platform movement	
POSITIONING		Position the unit at a location	X	X	
SUITABILITY		Carry out the suitability examination	X	X	
TRAVELLING		Visually check the condition of the MEWP	X	X	
Platform raised	Platform on vehicle axis (forwards or backwards)	Travel in a straight line forwards	X	X	
		Travel in a straight line backwards	X	X	
		Travel in a curve (slalom, bend) forwards	X	X	
		Travel in a curve (slalom, bend) backwards	X	X	
	Platform at right angles to vehicle to the left or to the right	Travel in a straight line forwards		X	
		Travel in a straight line backwards		X	
		Travel in a curve (slalom, bend) forwards		X	
		Travel in a curve (slalom, bend) backwards		X	
		Travel with simultaneous platform movements	X	X	
VERIFICATION		Interpret and execute the command and communication gestures	X	X	
		Travel with mastery of different types of ground	X	X	
		Use the audible warning correctly	X	X	
		Glance backwards before moving backwards	X	X	
		Respect for travelling rules and notice boards	X	X	
		Adapt driving to suit the traffic conditions (congestion, bend, etc.)	X	X	
		Smoothness of manœuvres	X	X	
		Accuracy of manœuvres	X	X	
		Behaviour in the event of an inclination warning	X	X	
		Position of the MEWP in its garage location (remove the key)	X	X	

Annex D
(informative)

Practical Knowledge Evaluation Test for Type 3 MEWPs — Example

TYPE 3 MEWPs

Date: _____

OBSERVATIONS

Name of examiner: _____

Name of candidate: _____

The trainee is capable of: _____

Mark if acceptable

			Vertical axis	Work platform movement	
SUITABILITY		Carry out the suitability examination	X	X	
VERIFICATION		Visually check the condition of the MEWP	X	X	
		Verify that the safety devices operate correctly	X	X	
Platform raised	Platform in the direction of travel	Travel in a straight line forwards	X	X	
		Travel in a straight line backwards	X	X	
		Travel in a curve (slalom, bend) forwards	X	X	
		Travel in a curve (slalom, bend) backwards	X	X	
	Platform in opposite direction to travel	Travel in a straight line forwards		X	
		Travel in a straight line backwards		X	
		Travel in a curve (slalom, bend) forwards		X	
		Travel in a curve (slalom, bend) backwards		X	
	Platform at right angles to direction of travel	Travel in a straight line forwards		X	
		Travel in a straight line backwards		X	
		Travel in a curve (slalom, bend) forwards		X	
		Travel in a curve (slalom, bend) backwards		X	

TRAVELLING	Travel with mastery of different types of ground	X	X	
	Use the audible warning correctly	X	X	
	Glance backwards before moving backwards	X	X	
	Respect for travelling rules and notice boards	X	X	
	Adapt driving to suit the traffic conditions (congestion, bend, etc.)	X	X	
	Smoothness of manœuvres	X	X	
	Accuracy of manœuvres	X	X	
POSITIONING	Interpret and execute the command and communication gestures	X	X	
	Position the unit at a location	X	X	
	Position the work platform along a flat vertical surface	X	X	
	Move the work platform along a flat vertical surface	X	X	
	Position the work platform above a flat surface		X	
	Move the work platform across this surface		X	
	Position the work platform below a flat surface	X	X	
	Move the work platform across this surface	X	X	
	Position the work platform in a restricted space		X	
	Behaviour in the event of an inclination warning	X	X	
	Move and position the platform with combined movements	X	X	
	Position the MEWP in its garage location (remove the key)	X	X	
EMERGENCY	Perform recovery manœuvres	X	X	
	Perform rescue manœuvres (from the ground position)	X	X	