



SLOVENSKI STANDARD
oSIST prEN 280-2:2018
01-november-2018

Premične dvizne delovne ploščadi - 2. del: Dodatne varnostne zahteve za naprave za dvigovanje tovora na dvizni napravi in delovni ploščadi

Mobile elevating work platforms - Part 2: Additional safety requirements for load lifting appliances on the extending lifting structure and work platform

Fahrbahre Hubarbeitsbühnen - Teil 2: Zusätzliche Sicherheitsanforderung für Lastaufnahmemittel an Hubeinrichtung und Arbeitsbühne

Plates formes élévatrices mobiles de personnel - Partie 2: Prescriptions de sécurité supplémentaires pour des appareils de levage fixés à la structure extensible ou à la plate forme de travail

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Ta slovenski standard je istoveten z: prEN 280-2

ICS:

53.020.99 Druga dvigalna oprema Other lifting equipment

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en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 280-2

September 2018

ICS 53.020.99

Will supersede EN 280:2013+A1:2015

English Version

Mobile elevating work platforms - Part 2: Additional safety requirements for load lifting appliances on the extending lifting structure and work platform

Plates-formes élévatrices mobiles de personnel - Partie 2: Part 2: Exigences de sécurité supplémentaires pour des appareils de levage fixés à la structure extensible ou à la plate-forme de travail

Fahrbahre Hubarbeitsbühnen - Teil 2: Zusätzliche Sicherheitsanforderung für Lastaufnahmemittel an Hubeinrichtung und Arbeitsbühne

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 98.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 280-2:2018) has been prepared by Technical Committee CEN/TC 98 “Lifting platforms”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 280:2013+A1:2015.

This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

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prEN 280-2:2018 (E)**Introduction**

This European Standard is a harmonized standard to provide one means for Mobile Elevating Work Platforms (MEWPs) of Type 1, equipped with a load lifting appliance and designed for lifting suspended loads, to conform to the essential health and safety requirements of the Machinery Directive 2006/42/EC.

This European Standard is a type C standard as stated in EN ISO 12100.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

The machinery concerned and the extent to which hazards are covered are indicated in the scope of this European Standard.

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1 Scope

This document, which shall be used in conjunction with EN 280-1:-¹, specifies the additional safety requirements for MEWPs of Type 1 equipped with a load lifting appliance. The load lifting appliance is designed for lifting suspended loads directly in support of the task being carried out by personal from the work platform. This European Standard deals with the significant hazards, hazardous situations and events relevant to the lifting of loads outside the scope of EN 280-1:-¹, when the MEWP and load lifting appliance are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer of the MEWP. The significant hazards covered by this standard are listed in Clause 4.

This European Standard does not cover the following:

- a) the use of a MEWP for lifting persons as a suspended load;
- b) the use of a MEWP for lifting suspended loads from a control position other than the work platform;

NOTE Where a control position other than the work platform is used the relevant crane standards (e.g. EN 13000, EN 12999) apply.

- c) requirements for lifting accessories;
- d) raising or lowering of suspended loads for general materials handling as carried out by a crane.

Load lifting devices can be:

- a) fixed load attachment points on the work platform or on the extending lifting structure;
- b) lifting equipment for raising or lowering the load with a stationary platform. The equipment is attached to the work platform or extending structure and may have a jib.

NOTE The lifting equipment can be either permanently attached or interchangeable.

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.

EN 280-1:-¹, *Mobile elevating work platforms — Part 1: Design calculations, Stability criteria, Construction — Safety, Examinations and tests*

EN 13001-2:2014, *Crane safety - General design — Part 2: Load actions*

EN 14492-2, *Cranes — Power driven winches and hoists — Part 2: Power driven hoists*

EN 60204-32, *Safety of machinery — Electrical equipment of machines — Part 32: Requirements for hoisting machines (IEC 60204-32)*

EN ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)*

¹) Under preparation. Stage at the time of publication: prEN 280-1:2018.

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EN ISO 13850, *Safety of machinery — Emergency stop function — Principles for design (ISO 13850)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 280-1:–1), EN ISO 12100:2010 and the following apply.

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

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1
load lifting appliance
load holding device or lifting equipment, which is permanently mounted or mounted as interchangeable equipment

3.2
fixed
defined positions, designed for mounting load lifting appliances

3.3
lifting equipment
hoist with or without jibs, with or without suspension elements and load holding device, which is permanently mounted or mounted as interchangeable equipment

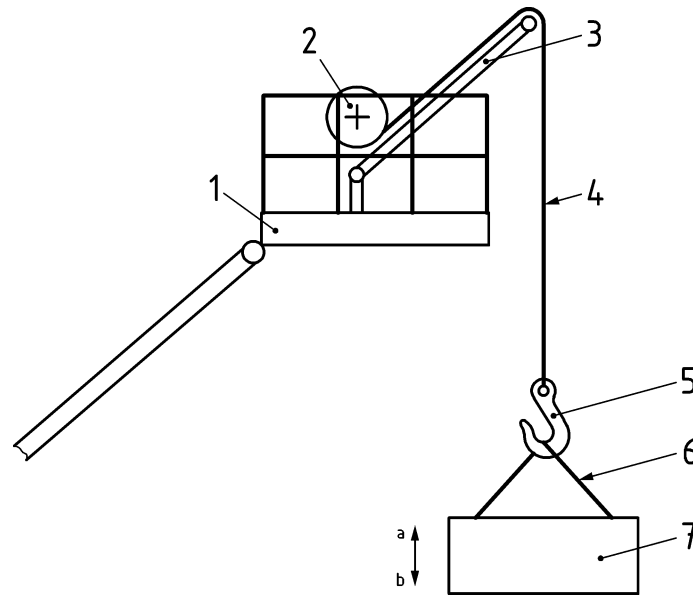
3.4
hoist
part of the lifting equipment enabling the raising and lowering of the load holding device over predefined distances with a suspension element, without movement of MEWP

3.5
suspension element
part of the lifting equipment which supports the load and is positioned between hoist and load holding device, e.g. ropes, chains or belts

3.6
load holding device
part of the lifting equipment which enables the lifting accessories to be supported and which is positioned between MEWP or suspension element and lifting accessory(s) (e.g. hook or lug)

3.7
lifting accessories
components or equipment parts that are located between the holding device of the lifting equipment and the load

3.8
load attachment point
load holding device directly attached to the extending structure or work platform of the MEWP

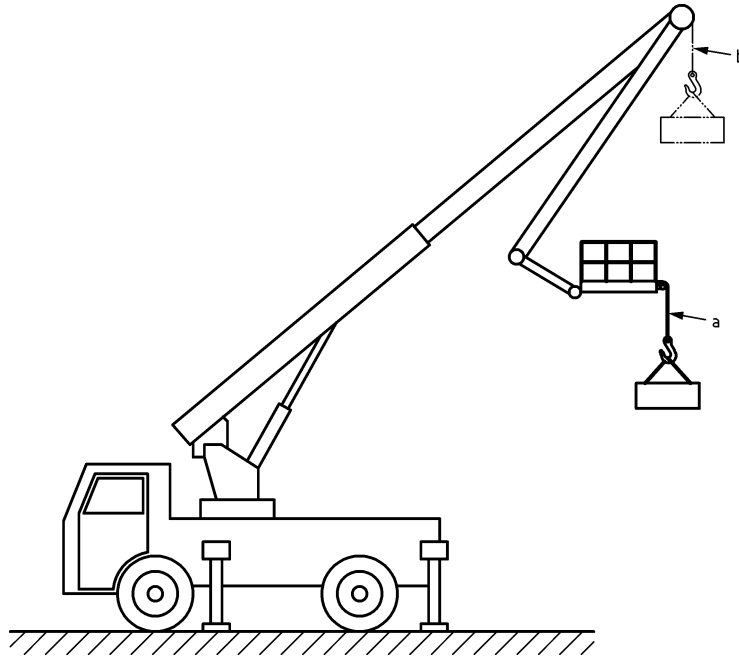
**Key**

- 1 work platform
- 2 hoist
- 3 jib
- 4 suspension element
- 5 load holding device
- 6 lifting accessories
- 7 load
- a raising
- b lowering

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Figure 1 — Illustration of some definitions using the example "material winch in the work platform"

**Key**

- a under or at the work platform
- b at the boom structure

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Figure 2 — Illustration of some definitions using the example load attachment point on the structure

4 List of significant hazards

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The additional hazards have been identified by the risk assessment procedure and the corresponding requirements formulated.

NOTE The hazards, which are listed in EN 280-1:-¹), are generally valid at the same time.

Table 1 — List of significant hazards

Significant additional hazards		Relevant clause(s) in this European Standard
1	Mechanical hazards	-
1.1	Crushing hazard	5.2.1, 5.2.2, 5.2.9
1.2	Shearing hazard	5.2.1, 5.2.2, 5.2.9
1.3	Cutting or severing hazard	5.2.1, 5.2.2
1.4	Entanglement hazard	5.2.1, 5.2.2
1.5	Drawing-in or trapping hazard	5.2.1, 5.2.2
1.6	Impact hazard	5.4
1.7	Stabbing or puncture hazard	5.2.1, 5.2.2
1.8	Friction or abrasion hazard	5.2.1, 5.2.2

Significant additional hazards		Relevant clause(s) in this European Standard
1.9	High pressure fluid injection hazard	5.2.6, 5.2.7
1.10	Ejection of parts	5.2.4, 5.4
1.11	Loss of stability (of machinery and machine parts)	5.1.2, 5.2.5, 5.4, 7.2.1
1.12	Slip, trip and fall hazards	NS
2	Electrical hazards, caused for example by:	5.2.8, 7.2.1. g
2.1	Electrical contact (direct or indirect)	5.2.8
2.2	Electrostatic phenomena	-
2.3	Thermal radiation	5.2.8
2.4	External influences on electrical equipment	5.2.8
3	Thermal hazards for example resulting in:	-
3.1	Burns, scalds and other injuries by a possible contact of persons with objects or materials with an extreme high or low temperature, by flames or explosions and also by the radiation of heat sources	5.2.6
3.2	Health-damaging effects by hot or cold work environment	5.2.6
4	Hazards generated by noise, resulting for example in:	-
4.1	Hearing losses (deafness), other physiological disorders (e.g. loss of balance, loss of awareness etc.)	5.2.1, 7.1.2 c
4.2	Interference with speech communication, acoustic signals, etc.	5.2.1
5	Hazards generated by vibration (resulting in a variety of neurological and vascular disorders)	NS
6	Hazards generated by radiation, especially by:	-
6.1	Electrical arcs	7.2.1. g
6.2	Lasers	NS
6.3	Ionising radiation sources	NS
6.4	Machine making use of high frequency electromagnetic fields	5.2.8
7	Hazards generated by materials and substances processed, used or exhausted by machinery for example:	NS
7.1	Hazards resulting from contact with or inhalation of harmful fluids, gases, mists, dusts and fumes	5.2.6
7.2	Fire or explosion hazard	NS
7.3	Biological and microbiological (viral or bacterial) hazards	NS
8	Hazards generated by neglecting ergonomic principles in machine design (mismatch of machinery with	-