სსტ ენ 1777:2010/2019

საქართველოს სტანდარტი

ხანძარსაწინააღმდეგო და სამაშველო სამსახურების ჰიდრავლიკური პლატფორმები (HPs) - უსაფრთხოების მოთხოვნები გამოცდისათვის

საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

სსტ ენ 1777:2010/2019

საინფორმაციო მონაცემები

1 შემუშავებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ

2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2019 წლის 6 დეკემბრის № 98 განკარგულებით

3 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 1777:2010 „ხანძარსაწინააღმდეგო და სამაშველო სამსახურების ჰიდრავლიკური პლატფორმები (HPs) - უსაფრთხოების მოთხოვნები გამოცდისათვის”

4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2019 წლის 6 დეკემბერი №268-1.3-016592

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English Version

Hydraulic platforms (HPs) for fire fighting and rescue services - Safety requirements and testing

Bras Élévateur Aérien (BEA) des services d'incendie et de secours - Prescriptions de sécurité et essais

Hubrettungsfahrzeuge für Feuerwehren und Rettungsdienste, Hubarbeitsbühnen (HABn) - Sicherheitstechnische Anforderungen und Prüfung

This European Standard was approved by CEN on 6 February 2010.

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Foreword

This document (EN 1777:2010) has been prepared by Technical Committee CEN/TC 192 “Fire service equipment”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2010, and conflicting national standards shall be withdrawn at the latest by September 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1777:2004+A1:2009.

This document has been prepared under a mandate 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.

Significant changes

The significant changes with respect to the previous edition EN 1777:2004+A1:2009 are listed below:

a) Scope revised to state more precisely, limitation of scope to HP's with classification group B – type 1 according to EN 280:2001, 1.4 only and deletion of requirements and tests relating to all other groups and types not covered by the scope, flat belts for extending structure drive systems excluded from scope;

b) terms and definitions of "hydraulic platform (HP)" and "levelling" added;

c) some terms and definitions revised;

d) list of significant hazards editorially revised and hazards relating to self propelled HP's and Group A HP's (where the vertical projection of the centre of gravity of the load is always inside the tipping lines) deleted, which are outside the scope;

e) specific tests directly linked to the appropriate requirement;

f) requirements relating to temperature range, forces, calculation, fatigue stress analyses, chassis and stabilizers revised;

g) requirements and tests added relating to "Moment sensing system with increased safety requirements and enhanced overload criteria" as a new, fourth solution to reduce tilting hazards and hazards caused by exceeding of permissible loads;

h) requirements and tests added relating to a minimum residual load of 6 % of the vehicle's unladen mass (obtained on the not loaded side, in the most unfavourable position);

i) new subclause 5.13 "Safety devices" added analogous to EN 280/A1:2004;

j) requirement added that the extending structure shall be supported in the transport position in such a way as to avoid harmful vibrations during transport;

k) requirement added that failures in wire rope or chain drive systems for extending structure shall be self-revealing;

l) maximum tensile grade of the wires in wire rope drive systems for extending structure increased to 2 160 N/mm^2;

m) leadscrew and rack and pinion drive systems deleted;

n) warning signals shall consist of a continuous visual warning and an acoustic signal;

o) height difference after the static overload test is now depending from the rescue height (for HP's with a rescue height up to 30 m, the height difference shall be less than 100 mm following application of 150 % of the rated load 10 min after unloading, for HP's with a rescue height greater than 30 m the manufacturer shall state the maximum height difference);

p) emergency evacuation means for the platform added (rescue ladder fixed in parallel to the extending structure or alternatives after carrying out a risk assessment);

q) requirements on platform doors and guardrails/handrails revised;

r) anchoring points for the allowed number of persons in the cage for personal protective equipment against falling added;

s) device added to stop all aggravating movements on sustaining impact;

t) requirements and tests relating to operator seat, controls and electrical systems revised;

u) pneumatic and hydraulic control systems revised that besides the specific requirements the basic standards EN 983 and EN 982 applies;

v) requirements and tests revised relating to static tilt angle δ;

w) at acceptance tests and at periodical examinations and tests the static overload test has been added;

x) instruction handbook added with test report, where appropriate, detailing the static and dynamic tests;

y) operating instructions for emergency added;

z) marking revised;

aa) Annex A and Annex B revised according to the changes in EN 280;

bb) former Annex F (Calculation example — Dynamic factor, kerb test) deleted, because the kerb test relates to self propelled HP's, which are outside the scope;

cc) content of standard editorially revised.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

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

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

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.

As no satisfactory explanation could be found for the dynamic factors used for stability calculations in EN 280 and previous national standards, the results of the tests carried out by CEN/TC 98 "Lifting platforms" to determine a suitable factor and stability calculation method for mobile elevating work platforms (MEWPs) have been adopted. The test method is described in Annex B as a guide for manufacturers wishing to use higher or lower operating speeds and to take advantage of developments in control systems.

Similarly, to avoid the unexplained inconsistencies in wire rope coefficients of utilization and drum and pulley diameters found in other standards for lifting devices, EN 280:2001, Annex C based on DIN 15020-1, together with EN 280:2001, Annex D, have been adopted.