სსტ ენ 15830:2012/2019

საქართველოს სტანდარტი

უსწორმასწორო რელიეფის მანქანები - ხილვადობა - გამოცდის მეთოდები და ვერიფიკაცია

საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

სსტ ენ 15830:2012/2019

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 15830:2012 „უსწორმასწორო რელიეფის მანქანები - ხილვადობა - გამოცდის მეთოდები და ვერიფიკაცია”

4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2019 წლის 6 დეკემბერი №268-1.3-016400

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 15830

May 2012

ICS 53.060

English Version

Rough-terrain variable reach trucks - Visibility - Test methods and verification

Chariots à portée variable tout-terrain - Visibilité - Méthodes d'essai et vérification

Geländegängige Flurförderzeuge mit veränderlicher Reichweite - Sichtverhältnisse - Prüfverfahren und Verifizierung

This European Standard was approved by CEN on 22 January 2012.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 15830:2012: E

Contents

Page

Foreword

This document (EN 15830:2012) has been prepared by Technical Committee CEN/TC 150 “Industrial trucks - Safety”, 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of an identical text or by endorsement, at the latest by November 2012, and conflicting national standards shall be withdrawn at the latest by November 2012.

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 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.

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, Turkey and the United Kingdom.

Introduction

This European Standard 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 standard.

Where there are provisions of this type-C standard which 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, but only for machines that have been designed and built in accordance with the provisions of this type-C standard.

The purpose of this standard is to address the operator's visibility in such a manner that the operator can see around the rough-terrain variable reach truck to enable proper, effective and safe operation that can be quantified in objective engineering terms. This standard includes a test method that uses two lights placed at the location of the operator’s eyes. The masking due to the truck, its components and attachments and a standard test load are determined around the truck, starting at a boundary line 1 m away from the smallest rectangle that encompasses the truck out to the visibility test circle. The radius of the circle is 12 m. The method used does not capture all of the aspects of the operator’s visibility, but provides information to assist in determining the acceptability of visibility from the truck. Criteria are included in this standard to provide guidance for designers as to the extent of visibility masking that are acceptable.

Due to the operator’s capability and the operation mode of the truck, the test method divides the area around the truck into six sectors: the front (sector A), to the front sides (sectors B and C), to the rear sides (sectors D and E), and to the rear (sector F).

For each of the sectors, the operator has physical characteristics that are considered. Besides the eye spacing of 65 mm (the nominal binocular eye spacing of the 50th percentile operator), additional adjustments (up to the limits specified in Tables 2 and 3) can be made considering that the operator has the capability to turn the head and move the body torso side to side. The eye spacings used are less than the maximum permitted values based on the ergonomics of the operator. This is done to maintain the current state-of-the-art of trucks.

Standard test loads are carried on or suspended from, devices on the truck during the visibility tests. They are intended to be dimensionally representative of typical loads carried by rough-terrain variable reach trucks and are used to determine their masking effects and to define representative boom geometry of the truck in normal uses.

The established visibility performance criteria are based on the physical aspects of the human operators and ground personnel using various representative dimensions and the design of trucks that have provided acceptable visibility. To establish the visibility criteria, a combination of the eye spacings and masking widths are used. Multiple masking in sectors are acceptable where there is adequate spacing between the individual masking. Where the direct visibility is considered inadequate, additional devices for indirect visibility [mirrors or closed circuit television cameras (CCTV)], can be used to achieve acceptable visibility. For the rectangular 1 m boundary (RB) additional devices for indirect visibility (mirrors or CCTV) are preferred. Other aids (see ISO 16001) can be used exceptionally.