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SÕIDUKITELE, MILLE TÄISMASS ÜLETAB 3,5 TONNI.
OHUTUSNÕUDED

Road vehicles - Roller brake testers for vehicles of
more than 3,5 tons GVW - Safety requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 17003:2021 sisaldab Euroopa standardi EN 17003:2021 ingliskeelset teksti.	This Estonian standard EVS-EN 17003:2021 consists of the English text of the European standard EN 17003:2021.
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English Version

Road vehicles - Roller brake testers for vehicles of more than 3,5 tons GVW - Safety requirements

Véhicules routiers - Freinomètres à rouleaux pour véhicules supérieurs à 3,5 t - Exigences de sécurité

Straßenfahrzeuge - Rollen-Bremsprüfstände für Fahrzeuge mit zulässigem Gesamtgewicht größer als 3,5 Tonnen - Sicherheitsanforderungen

This European Standard was approved by CEN on 13 September 2021.

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European foreword

This document (EN 17003:2021) has been prepared by Technical Committee CEN/TC 301 “Road vehicles”, and its working group WG11, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by May 2022, and conflicting national standards shall be withdrawn at the latest by May 2022.

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

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.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document is a type-C standard as stated in EN ISO 12100:2010.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved by means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate in the drafting process of this document.

The machinery concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this document. In addition, machinery should comply as appropriate with EN ISO 12100:2010 for hazards which are not covered by 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.

The objective of this document is to define rules for safeguarding persons against the risk of accidents associated with the operation of roller brake testers.

While elaborating this document, it was assumed that only authorized persons operate the roller brake testers.

1 Scope

This document applies to roller brake testers (brake test benches) that are designed for roadworthiness tests on categories M₂, M₃, N₂, N₃, O₃ and O₄ vehicles (as defined in Regulation (EU) 2018/858) and that might be also used to test M₁, N₁ categories.

This document covers fixed-bed roller brake testers with or without inspection pits and whose chassis are inside or outside the building.

This document does not cover mobile roller or plate brake testers.

These roller brake testers are used to take measurements for testing and assessing the efficiencies of the brake systems fitted to vehicles in the above-cited vehicle categories.

The users of the roller brake tester are all kinds of staff that for any reason operate the roller brake testers (e.g. staff working in public transport, vehicle rental, vehicle maintenance, vehicle repair, training, test laboratories and vehicle inspection sectors ...). This document is not applicable to roller brake testers manufactured before the date of its publication.

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 614-1:2006+A1:2009, *Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles*

EN 614-2:2000+A1:2008, *Safety of machinery - Ergonomic design principles - Part 2: Interactions between the design of machinery and work tasks*

EN 12464-1:2021, *Light and lighting - Lighting of work places - Part 1: Indoor work places*

EN 60204-1:2018, *Safety of machinery - Electrical equipment of machines - Part 1: General requirements (IEC 60204-1:2016)*

EN 61000-6-2:2005, *Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments (IEC 61000-6-2:2005)*

EN 61000-6-3:2007,¹ *Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments (IEC 61000-6-3:2006)*

EN 61496-1:2013, *Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests (IEC 61496-1:2012)*

EN 61496-2:2013, *Safety of machinery - Electro-sensitive protective equipment - Part 2: Particular requirements for equipment using active opto-electronic protective devices (AOPDs) (IEC 61496-2:2013)*

EN ISO 4871:2009, *Acoustics - Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)*

¹ As impacted by EN 61000-6-3:2007/A1:2011.

EN ISO 11201:2010, *Acoustics - Noise emitted by machinery and equipment - Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections (ISO 11201:2010)*

EN ISO 11688-1:2009, *Acoustics - Recommended practice for the design of low-noise machinery and equipment - Part 1: Planning (ISO/TR 11688-1:1995)*

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

EN ISO 13849-1:2015, *Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design (ISO 13849-1:2015)*

EN ISO 13850:2015, *Safety of machinery - Emergency stop function - Principles for design (ISO 13850:2015)*

EN ISO 14120:2015, *Safety of machinery - Guards - General requirements for the design and construction of fixed and movable guards (ISO 14120:2015)*

EN ISO 14122-2:2016, *Safety of machinery - Permanent means of access to machinery - Part 2: Working platforms and walkways (ISO 14122-2:2016)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in 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 <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1
roller brake tester
roller brake test bench
system utilised to produce brake force measurements for testing and assessing the efficiencies of vehicle braking systems

3.2
brake tester
term that, in this document, refers to roller brake tester (or brake test bench)

3.3
chassis
term that, in this document, refers to embedded or mounted mechanical floor units comprising the measuring rollers, drive and gearbox motors, and measuring devices, and that support the wheel or axle under test

3.4
fixed-bed control console
console that features as a minimum the human-machine interface: display, control devices, data storage

3.5
remote control
remote control which is used to navigate and control the human-machine interface at a distance