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Railway applications - Axleboxes - Performance testing CONSOLIDATED TEXT



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12082:2008+A1:2010 sisaldab Euroopa standardi EN 12082:2007+A1:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.12.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 27.10.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12082:2008+A1:2010 consists of the English text of the European standard EN 12082:2007+A1:2010.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.12.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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The standard is available from Estonian standardisation organisation. Oction School of the State of t

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EUROPEAN STANDARD

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English Version

Railway applications - Axleboxes - Performance testing

Applications ferroviaires - Boîtes d'essieux - Essais de performance

Bahnanwendungen - Radsatzlager - Prüfung des Leistungsvermögens

This European Standard was approved by CEN on 8 November 2007 and includes Amendment 1 approved by CEN on 14 September 2010.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 12082:2007+A1:2010) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by April 2011, and conflicting national standards shall be withdrawn at the latest by April 2011.

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 includes Amendment 1, approved by CEN on 2010-09-14.

This document supersedes A EN 12082:2007 (A).

The start and finish of text introduced or altered by amendment is indicated in the text by tags 🗗 🔠.

This document has been prepared under a mandate given to CEN/CENELEC/ETSI by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2008/57/EC.

For relationship with EU Directive 2008/57/EC, see informative Annex ZA, which is an integral part of this document. (A)

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 United Kingdom.

Introduction

This European Standard has been drawn up with the purpose of standardizing the performance testing of axleboxes for all types of rolling stock to ensure suitability for the required service, i.e. that the assembly of box housing, bearing, sealing and grease is well suited for the service requirements.

This testing is made up of two stages, a "rig performance test", described in detail in this European Standard, and a "field test". When rig performance testing is specified, it needs to be carried out in accordance with this European Standard. The extent of testing to be applied depends on the novelty of bearing design, seal design, grease formulation or box housing, as well as the application (see EN 12080 and EN 12081).

The rig performance test will check the satisfactory function of the assembly during a simulated journey. It is to be applied only if the axlebox is composed of elements delivered by suppliers that operate a quality management system¹⁾.

in s. The field test comprises monitoring on vehicles in service of a sufficiently large sample of axleboxes during a high mileage.

The systems used should offer equivalence with EN ISO 9001.

1 Scope

This European Standard specifies the principles and methods for a rig performance test of the system of box housing, rolling bearings, sealing and grease. Test parameters and minimum performance requirements for vehicles in operation on main lines are specified in Clause 6 and Annex A (normative). Different test parameters and performance requirements may be selected for vehicles in operation on other networks.

Basic principles for a field test are also determined.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12080, Railway applications — Axleboxes — Rolling bearings

EN 12081, Railway applications — Axleboxes — Lubricating greases

ISO 2137, Petroleum products — Lubricating grease and petrolatum — Determination of cone penetration

ISO 2176, Petroleum products — Lubricating grease — Determination of dropping point

ISO 3733, Petroleum products and bituminous materials — Determination of water — Distillation method

NF F 19-503²), Matériel roulant ferroviaire — Méthode d'essais des graisses pour boîtes d'essieux à roulements — Essai dynamique de la stabilité a l'oxydation des graisses

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

3.1

customer

railway undertaking, manufacturer or buyer of railway rolling stock or subassemblies, or their representative

3.2

railway undertaking

organisation or its representative, whatever status it has, which is responsible for the registration of rolling stock

3.3

supplier

supplier of rolling bearings, sealing, grease or box housings for axleboxes, manufactured under his responsibility

3.4

axlebox

assembly of box housing, rolling bearings, sealing and grease

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