

**Raudteealased rakendused. Teljelaagripuksides
kasutatavad määrdeained. Osa 2: Meetod
mehaanilise stabiilsuse kontrollimiseks veeremi
kiirustel kuni 200 km/h KONSOLIDEERITUD TEKST**

Railway applications - Axlebox lubricating greases -
Part 2: Method to test the mechanical stability to cover
vehicle speeds up to 200 km/h CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14865-2:2006+A1:2009 sisaldab Euroopa standardi EN 14865-2:2006+A1:2009 ingliskeelset teksti.

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Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 14865-2:2006+A1:2009 consists of the English text of the European standard EN 14865-2:2006+A1:2009.

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English Version

**Railway applications - Axlebox lubricating greases - Part 2:
Method to test the mechanical stability to cover vehicle speeds
up to 200 km/h**

Applications ferroviaires - Graisses lubrifiantes pour boîtes
d'essieux - Partie 2: Méthode d'essai de stabilité
mécanique pour des vitesses de véhicules allant jusqu'à
200 km/h

Bahnanwendungen - Schmierfette für Radsatzlager - Teil 2:
Prüfverfahren für mechanische Stabilität bei
Schienenfahrzeugen bis zu Geschwindigkeiten von
200 km/h

This European Standard was approved by CEN on 9 January 2006 and includes Amendment 1 approved by CEN on 24 February 2009.

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Foreword

This document (EN 14865-2:2006+A1:2009) 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of an identical text or by endorsement, at the latest by October 2009, and conflicting national standards shall be withdrawn at the latest by October 2009.

This document includes Amendment 1, approved by CEN on 2009-02-24.

This document supersedes EN 14865-2:2006.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

EN 14865 consists of the following parts, under the general title *Railway applications — Axlebox lubricating greases*:

- *Part 1: Method to test the ability to lubricate*
- *Part 2: Method to test the mechanical stability to cover vehicle speeds up to 200 km/h*

A1 For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document. A1

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, 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

A test method is standardized, which is referred to in EN 12081.

This European Standard standardizes a test method and acceptance criteria for the demand in EN 12081 for testing the mechanical stability of axlebox lubricating greases. It addresses the issue of mechanical stability of lubricating greases operating under severe conditions.

All lubricants have three main functions – to form a lubricating film that separates rolling elements and raceways, to protect the bearings from corrosion and to give good longevity. For lubricating grease there is a further demand: the product needs to be mechanically stable in use. Currently several common lubricating grease shear stability tests are available to industry, but the procedure in this European Standard is the most severe. It has been available for many years and it is used to discriminate between lubricating greases of different stabilities.

1 Scope

This European Standard specifies a test method and sets the acceptance criteria for the determination of the mechanical stability of lubricating greases intended for the lubrication of axlebox bearings according to EN 12081. In the test, impacts are applied to the lubricating grease so that only very stable lubricating greases will perform acceptably. The method is used in a discrimination process for finding lubricating greases of such mechanical stability that they are considered accepted lubricating greases for more extensive performance tests according to EN 12082.

For purposes of quality assurance and quality control, this test method is also used for batch testing of lubricating greases.

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 ISO 868, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness)* (ISO 868:2003)

EN ISO 3170, *Petroleum liquids — Manual sampling* (ISO 3170:2004)

EN ISO 4259:1995, *Petroleum products — Determination and application of precision data in relation to methods of test* (ISO 4259:1992/Cor 1:1993)

ISO 2137:1985, *Petroleum products — Lubricating grease and petrolatum — Determination of cone penetration*

ISO 5725-6:1994, *Accuracy (trueness and precision) of measurement methods and results — Part 6: Use in practice of accuracy values*