Railway applications - Track - Track geometry quality - Part 2: Measuring systems - Track recording vehicles

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13848-2:2006 sisaldab Euroopa standardi EN 13848-2:2006 ingliskeelset teksti.

Käesolev dokument on jõustatud 31.07.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13848-2:2006 consists of the English text of the European standard EN 13848-2:2006.

This document is endorsed on 31.07.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This European Standard specifies the minimum requirements for measuring principles and systems in order to produce comparable results. It applies to all measuring equipment fitted on dedicated recording vehicles, or on vehicles specifically modified for the same purpose, after the coming into force of the standard. It also defines the requirements of measurement.

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Applications ferroviaires - Voie - Qualité géométrique de la voie - Partie 2: Systèmes de mesure - Véhicules d'enregistrement de la voie

Bahnanwendungen - Oberbau - Qualität der Gleisgeometrie - Teil 2: Messsysteme - Gleismessfahrzeuge

This European Standard was approved by CEN on 23 March 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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

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Foreword

This document (EN 13848-2:2006) 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 November 2006, and conflicting national standards shall be withdrawn at the latest by November 2006.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This European Standard is one of the series EN 13848 "Railway applications — Track — Track geometry quality" as listed below:

- Part 1: Characterisation of track geometry
- Part 2: Measuring systems Track recording vehicles
- Part 3: Measuring systems Track construction and maintenance machines
- Part 4: Measuring systems Manual and light weight devices
- Part 5: Geometric quality assessment

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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 part 2 of the European Standard EN 13848 defines the specification for measurement systems to ensure that all track-recording vehicles produce comparable results when measuring the same track. In order to achieve this, it is essential to ensure that the methods of measurement are equivalent, the transfer functions cal a sts for v. of the filters are identical and the outputs and data storage formats are comparable. This standard doesn't define the requirements for vehicle acceptance.

1 Scope

This European Standard specifies the minimum requirements for measuring principles and systems in order to produce comparable results. It applies to all measuring equipment fitted on dedicated recording vehicles, or on vehicles specifically modified for the same purpose, after the coming into force of the standard. It also defines the requirements of measurement.

2 Normative references

The following referenced documents are indispensable for the application 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 13848-1, Railway applications - Track - Track geometry quality - Part 1: Characterisation of track geometry

Other informative references concerning the environmental conditions (refer to 5.2) are provided in the Bibliography.

3 Terms and definitions

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

3.1

track recording vehicle

self propelled or hauled vehicle with fixed, dedicated, measuring equipment and systems, used for the measurement, assessment and recording of track geometry parameters under loaded conditions, which measures and produces consistent results, to the requirements of EN 13848-1

3.2

sensor

device which detects, measures and translates characteristics of track geometry into quantities that can be used for further data processing

3.3

repeatability

degree of agreement between the values of successive measurements of the same parameter made under the same conditions (speed, direction of measurement), where the individual measurements are carried out on the same section of track subject to the following controls:

- same measurement method;
- same vehicle orientation;
- same method of interpretation;
- similar environmental conditions;
- short period of time between successive runs.