

**RAUDTEEALASED RAKENDUSED. RÖÖBASTEE.
RÖÖBASTEE GEOMEETRILINE KVALITEET. OSA 1:
RÖÖBASTEE GEOMEETRILINE ISELOOMUSTUS**

**Railway applications - Track - Track geometry quality -
Part 1: Characterisation of track geometry
CONSOLIDATED TEXT**

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-EN 13848-1:2004+A1:2008 sisaldab Euroopa standardi EN 13848-1:2003+A1:2008 ingliskeelset teksti.	This Estonian standard EVS-EN 13848-1:2004+A1:2008 consists of the English text of the European standard EN 13848-1:2003+A1:2008.
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Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 02.07.2008.	Date of Availability of the European standard is 02.07.2008.
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ICS 93.100

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English Version

Railway applications - Track - Track geometry quality - Part 1: Characterisation of track geometry

Applications ferroviaires - Voie - Qualité géométrique de la
voie - Partie 1: Caractérisation de la géométrie de voie

Bahnanwendungen - Oberbau - Gleislagequalität - Teil 1:
Beschreibung der Gleisgeometrie

This European Standard was approved by CEN on 26 June 2003 and includes Amendment 1 approved by CEN on 6 June 2008.

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Foreword

This document (EN 13848-1:2003+A1:2008) 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of an identical text or by endorsement, at the latest by January 2009 and conflicting national standards shall be withdrawn at the latest by January 2009.

This document includes Amendment 1, approved by CEN on 2008-06-06.

This document supersedes EN 13848-1:2003.

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{A1}$ $\boxed{A1}$.

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.

Annex A and B are informative.

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

This European Standard defines the minimum requirements for the principal track geometric parameters that characterise track geometry quality. Other parameters, for example, acceleration and rail characteristics, also have an important role in contributing towards ride quality. Refer to annexes A and B for further information on these parameters.

It comprises two informative annexes (annex A and annex B).

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

- *Part 1 : Characterization of track geometry*
- *Part 2 : Measuring devices - Track recording vehicles*
- **A1** *Part 3 : Measuring systems — Track construction and maintenance machines*
- *Part 4 : Measuring systems — Manual and lightweight devices*
- *Part 5 : Geometric quality levels* **A1**

1 Scope

^{A1} This European Standard specifies the requirements for the homologation of track geometry quality parameters as measured by various measuring devices fitted on track recording vehicles. ^{A1} These measuring devices are described in ^{A1} Part 2 ^{A1} of the standard. This European Standard applies to all track geometry parameters including track gauge, longitudinal level, alignment, cross level (cant / superelevation) and twist. It defines each parameter and specifies the requirements for measurement, the analysis methods and the presentation of results. ^{A1} Parts 3 and 4 give a description of measuring devices complying partially with this Part 1 according to the specificities of respectively track construction and maintenance machines, and manual and lightweight devices. ^{A1}

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

^{A1} EN 13848-2, *Railway applications — Track — Track geometry quality — Part 2: Measuring systems — Track recording vehicles* ^{A1}

ENV 13005:1999, *Guide to the expression of uncertainty in measurement*

3 Terms, definitions, symbols and abbreviated terms

3.1 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply (refer also to the terms and definitions described in clause 4 of this part).

3.1.1

track geometry quality

assessment of excursions from the mean or designed geometrical characteristics of specified parameters in the vertical and lateral planes which give rise to safety concerns or have a correlation with ride quality

3.1.2

gauge face

inside face of the running rail head

3.1.3

running table

upper surface of the head of the rail

3.1.4

running surface

curved surface defined by the longitudinal displacement of a straight line perpendicular to the centre-line of the track and tangential to both running tables

3.1.5

running plane

plane tangential to the running surface at the point of measurement