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NSAI Standards

Irish Standard
I.S. EN 13848-1:2019

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

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I.S. EN 13848-1:2019 is the adopted Irish version of the European Document EN 13848-1:2019, Railway applications - Track - Track geometry quality - Part 1: Characterization of track geometry

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EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 13848-1

March 2019

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Supersedes EN 13848-1:2003+A1:2008

English Version

Railway applications - Track - Track geometry quality - Part 1: Characterization 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 23 December 2018.

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Contents

Page

European foreword ... 5
1 Scope ... 7
2 Normative references ... 7
3 Terms and definitions ... 7
4 Symbols and abbreviations ... 10
5 Description of the track coordinate system ... 10
6 Principal track geometric parameters ... 11
6.1 Track gauge ... 11
6.1.1 General ... 11
6.1.2 Measurement method ... 12
6.1.3 Wavelength range ... 12
6.1.4 Resolution ... 12
6.1.5 Measurement uncertainty ... 12
6.1.6 Range of measurement ... 12
6.1.7 Analysis method ... 12
6.2 Longitudinal level ... 12
6.2.1 General ... 12
6.2.2 Measurement method ... 13
6.2.3 Wavelength range ... 13
6.2.4 Resolution ... 14
6.2.5 Measurement uncertainty ... 14
6.2.6 Range of measurement ... 14
6.2.7 Analysis method ... 14
6.3 Cross level ... 14
6.3.1 General ... 14
6.3.2 Measurement method ... 15
6.3.3 Wavelength range ... 15
6.3.4 Resolution ... 15
6.3.5 Measurement uncertainty ... 15
6.3.6 Range of measurement ... 15
6.3.7 Analysis method ... 15
6.4 Alignment ... 16
6.4.1 General ... 16
6.4.2 Measurement method ... 16
6.4.3 Wavelength range ... 16
6.4.4 Resolution ... 17
6.4.5 Measurement uncertainty ... 17
6.4.6 Range of measurement ... 17
6.4.7 Analysis method ... 17
6.5 Twist ... 17
6.5.1 General ... 17
6.5.2 Measurement method ... 17
6.5.3 Wavelength range ... 17
6.5.4 Resolution ... 17
6.5.5 Measurement uncertainty ... 17

This is a free page sample. Access the full version online.

6.5.6 Range of measurement ... 18
6.5.7 Analysis methods ... 18

7 Measurement conditions ... 18

Annex A (informative) Decolouring process ... 19
A.1 Definition of decolouring ... 19
A.2 Decolouring method ... 20
A.3 Verification of a decolouring process ... 21
A.3.1 Introduction ... 21
A.3.2 Verification with test signals ... 21
A.3.3 Verification with recorded track geometry data ... 22

Annex B (informative) Other parameters ... 24
B.1 Introduction ... 24
B.2 Parameters obtained by direct measurement ... 24
B.3 Parameters obtained by derived measurement to establish in-service values ... 24
B.3.1 Cyclic irregularities ... 24
B.3.2 Dip angle ... 25
B.3.3 Other parameters ... 25
B.3.4 Rail measurements ... 26
B.3.5 Supporting data ... 26

Annex C (normative) Filter requirements ... 27
C.1 General requirements ... 27
C.2 Tolerance bands for filter transfer functions ... 27
C.2.1 Introduction ... 27
C.2.2 Filter for *D1* ... 27
C.2.3 Filter for *D2* ... 30

Annex D (informative) Background to filtering ... 33
D.1 Selection of tolerance bands ... 33
D.2 Guideline for custom filters ... 33
D.3 Implementation of filters ... 36
D.3.1 Off-line implementation ... 36
D.3.2 Online implementation ... 36
D.4 Reference filter ... 37
D.5 Conversion of results of deviating filters ... 37
D.6 Comparison of different measurement systems ... 42

Annex E (informative) Measurement of acceleration ... 43
E.1 Introduction ... 43
E.2 Measurement method ... 43
E.3 Frequency range ... 43
E.4 Range of measurement ... 43
E.5 Sampling frequency ... 43
E.6 Measurement conditions ... 44
E.7 Analysis method ... 44
E.8 Output requirements ... 44
E.9 Output presentation ... 44

Annex F (informative) Track geometry data for simulation purposes ... 45
F.1 Introduction ... 45
F.2 Contents of track geometry data for simulation purposes ... 45
F.3 Extended wavelength range ... 46
F.4 Numerical resolution ... 46
F.5 Pre-processing for simulation ... 47

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Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC aimed to be covered 48

Bibliography 50

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European foreword

This document (EN 13848-1:2019) 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 September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

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 supersedes EN 13848-1:2003+A1:2008.

The main changes with respect to the previous edition are listed below:

— Uncertainty and resolution values are exported to the relevant other parts (EN 13848-2, -3 and -4);

— Addition of *D0* domain;

— New Annex A on decolouring;

— Improvement of Annex B on mainly cyclic top and dip angle;

— New Annex C and D on filtering;

— New Annex F on simulation.

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 2008/57/EC.

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

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

— *Part 1: Characterization 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 lightweight devices*;

— *Part 5: Geometric quality levels — Plain line, switches and crossings*;

— *Part 6: Characterisation of track geometry quality*.

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1 Scope

This document gives definitions for the principal track geometry parameters and specifies minimum requirements for measurement and the analysis methods. The aim is to allow the comparability of the output of different measuring systems.

This document does not apply to Urban Rail Systems.

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 13848-2, *Railway applications — Track — Track geometry quality — Part 2: Measuring systems — Track recording vehicles*

EN 13848-3, *Railway applications — Track — Track geometry quality — Part 3: Measuring systems — Track construction and maintenance machines*

EN 13848-4, *Railway applications — Track — Track geometry quality — Part 4: Measuring systems — Manual and lightweight devices*

EN 13848-5:2017, *Railway applications — Track — Track geometry quality — Part 5: Geometric quality levels — Plain line, switches and crossings*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

NOTE Refer also to the symbols and definitions described in Clause 4.

3.1
track geometry quality
assessment of excursions in the vertical and lateral planes from the mean or designed geometrical characteristics of specified parameters which give rise to safety concerns or have a correlation with ride quality

3.2
gauge face
inside face of the running rail head

3.3
running table
upper surface of the head of the rail

Note 1 to entry: See Figure 1.

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