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MEETOD

Railway applications - Wheelsets and bogies - Method
of specifying the structural requirements of bogie
frames

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13749:2021 sisaldab Euroopa standardi EN 13749:2021 ingliskeelset teksti.	This Estonian standard EVS-EN 13749:2021 consists of the English text of the European standard EN 13749:2021.
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EUROPEAN STANDARD

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English Version

Railway applications - Wheelsets and bogies - Method of specifying the structural requirements of bogie frames

Applications ferroviaires - Essieux montés et bogies -
Méthode pour spécifier les exigences en matière de
résistance des structures de châssis de bogie

Bahnanwendungen - Radsätze und Drehgestelle -
Festlegungsverfahren für Festigkeitsanforderungen an
Drehgestellrahmen

This European Standard was approved by CEN on 15 February 2021.

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European foreword

This document (EN 13749:2021) has been prepared by Technical Committee 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of an identical text or by endorsement, at the latest by September 2021, and conflicting national standards shall be withdrawn at the latest by September 2021.

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 13749:2011.

The general scope and requirements of EN 13749 are unaltered by this revision. Changes were necessary to mainly correct errors in some formulae and textural corrections in line with the CEN rules.

Informative annexes in this standard give additional information that is not mandatory but intended to assist the understanding or use of the document.

NOTE Informative annexes sometimes contain optional requirements. For instance, a test method that is optional, or expressed as an example, contains requirements but there is no need to comply with these requirements to claim compliance with the document.

This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2016/797/EC.

For relationship with EU Directive 2016/797/EC, see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies the method to be followed to achieve a satisfactory design of bogie frames and includes design procedures, assessment methods, verification and manufacturing quality requirements. It is limited to the structural requirements of bogie frames including bolsters and axlebox housings. For the purpose of this document, these terms are taken to include all functional attachments, e.g. damper brackets.

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 15085-1:2007+A1:2013, *Railway applications - Welding of railway vehicles and components - Part 1: General*

EN 15085-2:2007, *Railway applications - Welding of railway vehicles and components - Part 2: Quality requirements and certification of welding manufacturer*

EN 15085-3:2007, *Railway applications - Welding of railway vehicles and components - Part 3: Design requirements*

EN 15085-4:2007, *Railway applications - Welding of railway vehicles and components - Part 4: Production requirements*

EN 15085-5:2007, *Railway applications - Welding of railway vehicles and components - Part 5: Inspection, testing and documentation*

EN 15663:2017+A1:2018, *Railway applications - Vehicle reference masses*

EN 15827:2011, *Railway applications - Requirements for bogies and running gears*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15827:2011 and the following 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 Annex A identifies the symbols, units, coordinate system and bogie categories used in the informative annexes to this European standard.

3.1

axlebox

assembly comprising the box housing, rolling bearings, sealing and grease

3.2

bogie frame

load-bearing structure generally located between primary and secondary suspension