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Railway applications - Axleboxes - Part 2: Deployment Procedure

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Railway applications - Axleboxes - Deployment Procedure

Applications ferroviaires - Boîtes d'essieux - Procédure
de déploiementBahnanwendungen - Radsatzlager - Teil 2:
Inverkehrbringungsprozess

This European Standard was approved by CEN on 17 November 2025.

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EUROPÄISCHES KOMITEE FÜR NORMUNG**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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European foreword

This document (EN 12082-2:2025) 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of an identical text or by endorsement, at the latest by June 2026, and conflicting national standards shall be withdrawn at the latest by May 2026.

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 12082:2017+A1:2021.

EN 12082-2:2025 includes the following significant technical changes with respect to EN 12082:2017+A1:2021:

- Document split into EN 12082-1 about Test procedures and EN 12082-2 about Deployment procedure.
- Focus of EN 12082-2 is on process and requirements for the deployment of the axlebox system. This eliminates usage of the ambiguous term approval and clarifies that it is the axlebox that is in scope of the deployment.
- Criteria which define objectives and extent of the deployment procedure are redefined, further clarified and respective clauses moved from EN 12080 to EN 12082-2.
- Compatibility assessment of grease with polymers and thermoplastic material moved from EN 12081 to EN 12082-2.
- Annex including Examples of axleboxes moved from EN 12080 to EN 12082-2.
- Saddle adapter added as a possible housing design to the overview of common axlebox designs.

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).

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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1 Scope

This document is a part of a package of standards: EN 12080, EN 12081, EN 12082-1 and EN 12082-2.

This document specifies the principles and methods for deployment of the system of axlebox rolling bearing(s), housing, seal(s) and grease, required for reliable operation of trains on European networks.

It covers the conformity assessment with respect to design requirements on the rolling bearing(s) according EN 12080 and grease according EN 12081 as well as the performance of (rig) tests according to EN 12082-1. This document is historically developed for outboard applications with rotating inner rings, but can be used for vehicles with inboard bearing arrangements with rotating inner rings.

The present document describes the complete deployment procedure for new axleboxes and it specifies the necessary type and extent of testing. For certain cases and based on a documented risk assessment, a reduced deployment procedure is described.

This document only applies to axleboxes equipped with rolling bearings and greases according to EN 12080 and EN 12081.

It is not within the scope of EN 12082-2 to specify the technical details of the testing procedures, these are covered by EN 12082-1.

It is not within the scope of EN 12082-2 to define the validation procedure of box housings, sleeves or covers from a structural point of view. The relevance of these parts in the scope of this document is limited to the interaction with the axle box rolling bearing with respect to the required service.

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 12080:2025, *Railway applications — Axleboxes — Rolling bearings*

EN 12081:2025, *Railway applications — Axleboxes — Lubricating greases*

EN 12082-1:2025, *Railway applications — Axleboxes — Test procedures*

EN 15663:2017+A2:2024, *Railway applications - Vehicle reference masses*

ISO 1817:2024, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*