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KONSTRUKTSIOONI NÕUDED

Railway applications - Track - Switches and crossings
for Vignole rails - Part 2: Requirements for geometric
design

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 13232-2:2023 sisaldab Euroopa standardi EN 13232-2:2023 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 11.10.2023.</p> <p>Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 13232-2:2023 consists of the English text of the European standard EN 13232-2:2023.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 11.10.2023.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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English Version

Railway applications - Track - Switches and crossings for
Vignole rails - Part 2: Requirements for geometric design

Applications ferroviaires - Voie - Appareils de voie
pour rails Vignole - Partie 2 : Exigences pour la
conception géométrique

Bahnanwendungen - Oberbau - Weichen und
Kreuzungen für Vignolschienen - Teil 2: Anforderungen
an den geometrischen Entwurf

This European Standard was approved by CEN on 23 October 2022.

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COMITÉ EUROPÉEN DE NORMALISATION
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 13232-2:2023) 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of an identical text or by endorsement, at the latest by April 2024, and conflicting national standards shall be withdrawn at the latest by April 2024.

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 13232-2:2003+A1:2011.

This series of standards “Railway applications – Track – Switches and crossings for Vignole rails” covers the design and quality of switches and crossings in flat bottomed rail. The list of Parts is as follows:

- *Part 1: Definitions*
- *Part 2: Requirements for geometric design*
- *Part 3: Requirements for wheel/rail interaction*
- *Part 4: Actuation, locking and detection*
- *Part 5: Switches*
- *Part 6: Fixed common and obtuse crossings*
- *Part 7: Crossings with moveable parts*
- *Part 8: Expansion devices*
- *Part 9: Layouts*

Part 1 contains terminology used throughout all parts of this series. Parts 2 to 4 contain basic design guides and are applicable to all switch and crossing assemblies. Parts 5 to 8 deal with particular types of equipment including their tolerances. These use Parts 1 to 4 as a basis. Part 9 defines the geometric and non-geometric acceptance criteria for inspection of layouts.

The changes introduced in this document set the geometric parameters for switch and crossing design in the context of the design process, providing more detail to the user of the standard. A number of figures have been also updated to improve clarity.

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

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.

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, Türkiye and the United Kingdom.

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1 Scope

This document:

- establishes the design process for switches and crossings (S&C), and the use of the other parts of this standard;
- specifies the geometric design principles for wheel guidance;
- establishes the basic limits of supply;
- establishes the applied forces and their adequate support;
- specifies tolerance levels.

These are illustrated herein by application to a turnout. The main switch and crossing components are represented in turnouts and the principles used in turnouts apply equally to more complex layouts.

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 13232-1:2023, *Railway applications – Track – Switches and crossings for Vignole rails – Part 1: Definitions*

EN 13232-3:2023, *Railway applications – Track – Switches and crossings for Vignole rails – Part 3: Requirements for wheel/rail interaction*

EN 13232-4:2023, *Railway applications – Track – Switches and crossings for Vignole rails – Part 4: Actuation, locking and detection*

EN 13232-5:2023, *Railway applications – Track – Switches and crossings for Vignole rails – Part 5: Switches*

EN 13232-6:2023, *Railway applications – Track – Switches and crossings for Vignole rails – Part 6: Fixed common and obtuse crossings*

EN 13232-7:2023, *Railway applications – Track – Switches and crossings for Vignole rails – Part 7: Crossings with moveable parts*

EN 13232-9:2023, *Railway applications – Track – Switches and crossings for Vignole rails – Part 9: Layouts*

EN 15273-3:2013+A1:2016, *Railway applications - Gauges - Part 3: Structure gauges*