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Railway applications - Track - Concrete sleepers and
bearers - Part 3: Twin-block reinforced sleepers

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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ICS 91.100.30, 93.100

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EUROPEAN STANDARD

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English Version

Railway applications - Track - Concrete sleepers and bearers - Part 3: Twin-block reinforced sleepers

Applications ferroviaires - Voie - Traverses et supports en béton - Partie 3 : Traverses blocs en béton armé

Bahnanwendungen - Oberbau - Gleis- und Weichenschwellen aus Beton - Teil 3: Bewehrte Zweiblockschwellen

This European Standard was approved by CEN on 4 March 2016.

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European foreword

This document (EN 13230-3:2016) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.

This document supersedes EN 13230-3:2009.

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of an identical text or by endorsement, at the latest by November 2016, and conflicting national standards shall be withdrawn at the latest by November 2016.

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 13230 series "*Railway applications – Track – Concrete sleepers and bearers*", which consists of the following parts:

- Part 1: General requirements
- Part 2: Prestressed monoblock sleepers
- Part 3: Twin-block reinforced sleepers
- Part 4: Prestressed bearers for switches and crossings
- Part 5: Special elements
- Part 6: Design

There is a change in the wording of the documents of EN 13230 (series) "design bending moment" is replaced by "characteristic bending moment" and "test bending moment".

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This part of the EN 13230 series defines the specific requirements dedicated to twin-block reinforced sleepers.

These are additional requirements to EN 13230-1:2016 that are necessary to have a complete standard dealing with twin-block reinforced sleepers.

The document specifies the test arrangements and the test procedures to implement and also the corresponding acceptance criteria just as the design approval tests.

It also specifies the steel connecting bar characteristics and the design criteria for incorporating the steel connecting bar within the twin-block reinforced sleepers.

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1 Scope

This part of the EN 13230 series defines technical criteria and control procedures for manufacturing and testing twin-block reinforced concrete sleepers.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 206, *Concrete - Specification, performance, production and conformity*

EN 13230-1:2016, *Railway applications – Track – Concrete sleepers and bearers – Part 1: General requirements*

prEN 13230-6:2015, *Railway applications – Track – Concrete sleepers and bearers – Part 6: Design*

EN ISO 6506-1, *Metallic materials - Brinell hardness test - Part 1: Test method (ISO 6506-1)*

EN ISO 6892-1, *Metallic materials - Tensile testing - Part 1: Method of test at room temperature (ISO 6892-1)*

3 Terms, definitions and symbols

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13230-1:2016 and the following apply.

3.1.1

steel connecting bar

steel profile which connects reinforced concrete blocks