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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13230-3:2009 sisaldab Euroopa standardi EN 13230-3:2009 ingliskeelset teksti.

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English Version

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

Applications ferroviaires - Voie - Traverses et support en
béton - Partie 3 : Traverses biblocs en béton armé

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

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Foreword

This document (EN 13230-3:2009) 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of an identical text or by endorsement, at the latest by December 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13230-3:2002.

This European Standard is one of the series EN 13230 "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

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 EC Directive 2008/57/EC.

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This part of the standard defines the specific requirements dedicated to twin-block reinforced sleepers.

These are additional requirements to EN 13230-1:2009 and 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.

1 Scope

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

2 Normative references

The following referenced documents are indispensable for the application 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 206-1, *Concrete – Part 1: Specification, performance, production and conformity*

EN 10002-1, *Metallic materials – Tensile testing – Part 1: Method of test at ambient temperature*

EN 13230-1:2009, *Railway applications – Track – Concrete sleepers and bearers – Part 1: General requirements*

EN ISO 6506-1, *Metallic materials – Brinell hardness test – Part 1: Test method (ISO 6506-1:1999)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13230-1:2009 and the following apply.

3.1

steel connecting bar

steel profile which connects reinforced concrete blocks

4 Product testing

4.1 Test arrangements

This section defines the testing regime and rules for acceptance of twin-block concrete sleepers.

The layout of test arrangements for the rail seat section tests are defined in this section.

4.1.1 Symbols

The following symbols are used as defined in Table 1: