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ERIoTSTARBELISED ELEMENDID

Railway applications - Track - Concrete sleepers and  
bearers - Part 5: Special elements

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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|---|--|
| See Eesti standard EVS-EN 13230-5:2016 sisaldab Euroopa standardi EN 13230-5:2016 ingliskeelset teksti.             | This Estonian standard EVS-EN 13230-5:2016 consists of the English text of the European standard EN 13230-5:2016.                  |
| Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.  | This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. |
| Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 11.05.2016. | Date of Availability of the European standard is 11.05.2016.   |
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English Version

## Railway applications - Track - Concrete sleepers and bearers - Part 5: Special elements

Applications ferroviaires - Voie - Traverses et supports  
en béton - Partie 5 : Éléments spéciaux

Bahnanwendungen - Oberbau - Gleis- und  
Weichenschwellen aus Beton - Teil 5: Sonderformen

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

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## European foreword

This document (EN 13230-5:2016) has been prepared by Technical Committee CEN/TC 256 “Railway applications”, the secretariat of which is held by DIN.

This document supersedes EN 13230-5:2009.

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of an identical text or by endorsement, at the latest by November 2016, and conflicting national standards shall be withdrawn at the latest by November 2016.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 European Standard is one of the EN 13230 (series) “*Railway applications – Track – Concrete sleepers and bearers*”, which consist 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 relating to special elements.

These are additional requirements to EN 13230-1:2016 that are necessary to have a complete standard dealing with special elements.

These special elements are prestressed concrete special elements as special sleepers or special bearers and reinforced concrete special elements. They are generally used within specific domains of the track for ballastless tracks, for bridges, or with check rails for instance.

This part of EN 13230 defines additional technical criteria and control procedures related to manufacturing and testing special elements. It completes the requirements of EN 13230-2:2016, EN 13230-3:2016 and EN 13230-4:2016.

## 1 Scope

This part of the EN 13230 series defines additional technical criteria and control procedures for manufacturing and testing special elements.

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

EN 13230-2:2016, *Railway applications – Track – Concrete sleepers and bearers – Part 2: Prestressed monoblock sleepers*

EN 13230-3:2016, *Railway applications – Track – Concrete sleepers and bearers – Part 3: Twin-block reinforced sleepers*

EN 13230-4:2016, *Railway applications – Track – Concrete sleepers and bearers – Part 4: Prestressed bearers for switches and crossings*

## 3 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

#### **special element**

any individual concrete element supporting rails in the field of railway track construction, to which this standard is relevant, but which is not included in EN 13230-2:2016, EN 13230-3:2016 or EN 13230-4:2016 (slabs and longitudinal beams are excluded)

## 4 Requirements

A special element shall be defined by detailed drawings including tolerances.

All the tolerances specified in EN 13230-1:2016 which relate to the concrete elements, the rails, the fastening system and gauge shall be specified by the purchaser.

The purchaser shall specify the positive and negative characteristic bending moments to be applied:

- a) at the rail seat section;
- b) at the centre section or any relevant section.