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Railway applications — Concrete sleepers and bearers for track —

Part 2: Prestressed monoblock sleepers

Applications ferroviaires — Traverses et supports en béton pour la voie —

Partie 2: Traverses monoblocs précontraintes

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 269, *Railway applications*, Subcommittee SC 1, *Infrastructure*.

This document is used in conjunction with ISO 22480-1.

A list of all parts in the ISO 22480 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Railway applications — Concrete sleepers and bearers for track —

Part 2: Prestressed monoblock sleepers

1 Scope

This document defines additional technical criteria and control procedures related to the manufacturing and testing of prestressed monoblock sleepers.

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.

ISO 22480-1, *Railway applications — Concrete sleepers and bearers for track — Part 1: General requirements*

ISO 22074-8, *Railway infrastructure — Rail fastening systems — Part 8: Determination of stiffness*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 22480-1 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Symbols and abbreviated terms

For the purpose of this document, the symbols given in ISO 22480-1:2022, Clause 4 and the following apply.

Symbol	Description	Unit
F_c	load applied at the centre of the sleeper for positive bending test at the centre section	kN
F_{cB}	maximum test load which cannot be increased during positive bending test at the centre section	kN
F_{cBn}	maximum test load which cannot be increased during negative bending test at the centre section	kN
F_{cn}	load applied at the centre of the sleeper for negative bending test at the centre section	kN
F_r	load applied at the centre line of the rail seat for positive bending test at the rail seat section	kN
$F_{r,min,cyc}$	minimum cyclic test load for the rail seat section cyclic test; $F_{r,min,cyc}$ = min (50 kN; 0,4 × F_{r0}) unless specified otherwise by the purchaser.	kN