
**Railway applications — Railway
braking — Country specific
applications for ISO 20138-1**

*Applications ferroviaires — Freinage ferroviaire — Applications
nationales spécifiques de l'ISO 20138-1*



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Contents

Page

Foreword.....	iv
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Slowing or stopping distance calculation using a method implemented in France.....	1
4.1 General.....	1
4.2 Symbols and abbreviations.....	1
4.3 Slowing or stopping distance calculation.....	2
4.3.1 French model for “G” position.....	2
4.3.2 Calculation using ISO 20138-1:2018, 5.7.5.1 step model.....	4
4.4 Example of calculation.....	4
4.4.1 Test results.....	4
4.4.2 Comparison of calculation models with test results.....	5
5 Calculation of braking performance implemented in Japan.....	5
5.1 General.....	5
5.2 Brake ratio for a single vehicle.....	5
5.3 Example for brake ratio calculation.....	6
5.4 Equivalent response time.....	7
5.4.1 General.....	7
5.4.2 Case 1: Determination based on train speed.....	8
5.4.3 Case 2: Determination based on BC pressure response.....	8
6 Stopping or slowing distance calculation methods for some particular rolling stock in China.....	9
6.1 General.....	9
6.2 Symbols and abbreviations.....	9
6.3 Train resistance retarding forces.....	10
6.3.1 Basic running resistance.....	10
6.3.2 Curve resistance.....	12
6.4 Train braking force.....	13
6.4.1 Total braking force of train.....	13
6.4.2 Real friction coefficient.....	14
6.4.3 Conversion friction coefficient.....	14
6.4.4 Real brake block force.....	15
6.4.5 Nominal values of rigging efficiency.....	16
6.4.6 Emergency brake cylinder pressure.....	16
6.4.7 Conversion brake block force.....	17
6.4.8 Conversion braking ratio.....	18
6.4.9 Train unit brake ratio.....	20
6.4.10 Dynamic brake force.....	20
6.4.11 Coefficient of adhesion.....	21
6.5 Brake calculation.....	21
6.5.1 Braking time.....	21
6.5.2 Free running time.....	22
6.5.3 Stopping/slowng distance.....	22
Bibliography.....	24

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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).

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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 2, *Rolling stock*.

This second edition cancels and replaces the first edition (ISO/TR 22131:2018), which has been technically revised.

The main change is: the symbols and terms in [Clause 6](#) have been revised.

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 — Railway braking — Country specific applications for ISO 20138-1

1 Scope

This document provides additional information to assist the understanding and the use of ISO 20138-1. The calculations in this document follow the same principles but they are slightly different.

This document contains country specific calculation approaches currently in use and represents the state of knowledge including for calculating:

- stopping and slowing distances;
- equivalent response time;
- brake performance;
- brake ratio.

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 20138-1:2018, *Railway applications — Calculation of braking performance (stopping, slowing and stationary braking) — Part 1: General algorithms utilizing mean value calculation*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 20138-1 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 Slowing or stopping distance calculation using a method implemented in France

4.1 General

This calculation is based on the alternative method of equivalent response time calculation, as used in the French railway requirements, in particular, for trains operating in “G” position.

4.2 Symbols and abbreviations

For the purpose of [Clause 4](#), the terms, symbols and abbreviations defined in [Table 1](#) apply.