

STN	Železnice Referenčné hmotnosti vozidiel	STN EN 15663+A2 28 0002
------------	--	---

Railway applications - Vehicle reference masses

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/25

Obsahuje: EN 15663:2017+A2:2024

Oznámením tejto normy sa ruší
STN EN 15663+A1 (28 0002) z júna 2019

140211

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2025
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii
v znení neskorších predpisov.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 15663:2017+A2

December 2024

ICS 45.060.01

Supersedes EN 15663:2017+A1:2018

English Version

Railway applications - Vehicle reference masses

Applications ferroviaires - Masses de référence des
véhicules

Bahnanwendungen - Fahrzeugreferenzmassen

This European Standard was approved by CEN on 25 September 2018 and includes Amendment 2 approved by CEN on 18 November 2024.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 15663:2017+A2:2024 (E)

Contents	Page
European foreword.....	3
Introduction	4
1 Scope.....	5
2 Normative references.....	5
3 Terms, definitions and abbreviations	5
3.1 Terms and definitions	5
3.2 Abbreviations.....	7
4 Derivation of vehicle reference masses	9
4.1 General.....	9
4.2 Vehicle categories	9
4.3 Dead mass.....	10
4.4 Payload states.....	10
4.5 Reference masses.....	11
4.6 Special purpose mass definitions and payload states	12
5 Consumables, staff and wear allowance	13
6 Standing area calculation.....	13
7 Payloads.....	14
7.1 General.....	14
7.2 Payloads for M-I (high speed and long distance units).....	15
7.3 Payloads for M-II (passenger vehicles other than high speed and long distance units)	17
7.4 Payloads for M-III (freight vehicles)	19
Annex A (informative) Densities	20
Bibliography.....	21

European foreword

This document (EN 15663:2017+A2:2024) 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 June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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

This document includes Amendment 1 approved by CEN on 25 September 2018.

This document includes Amendment 2 approved by CEN on 18 November 2024.

This document supersedes A2 EN 15663:2017+A1:2018 A2.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A2 A2.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

A2 *deleted text* A2

This European Standard aims to support the TSIs and European Standards for the calculation of vehicle masses.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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

EN 15663:2017+A2:2024 (E)**Introduction**

To define the design, testing and operation of vehicles in general and their main constituent parts, it is necessary to clearly specify the associated states of loading. This European Standard provides such a set of vehicle reference masses and describes how each is derived.

1 Scope

This European Standard defines a set of reference masses for specifying the requirements for the design, testing, acceptance, marking, delivery and operation of rail vehicles.

The reference masses defined in this document are as follows:

- dead mass;
- design mass in working order;
- design mass under normal payload;
- design mass under exceptional payload;
- operational mass in working order;
- operational mass under normal payload.

These reference masses are defined with respect to the whole vehicle, but they can also apply to a specific system or component.

The specification of values for tolerances applicable to reference masses is not in the scope of this standard. Tolerances can be required by an application standard.

Additional loadings due to environmental factors, for example snow and retained or absorbed rainwater, are not in the scope of this European Standard.

2 Normative references

[A₂] 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.

EN 17343:2023, *Railway applications — General terms and definitions* **[A₂]**

koniec náhľadu – text ďalej pokračuje v platenej verzii STN