

STN	Železnice Brzdové kotúče pre železničné vozidlá Časť 2: Brzdové kotúče namontované na koleso, rozmery a požiadavky na kvalitu	STN EN 14535-2 28 4011
------------	--	--

Railway applications - Brake discs for railway rolling stock - Part 2: Brake discs mounted onto the wheel, dimensions and quality requirements

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. 08/19

Obsahuje: EN 14535-2:2019

Oznámením tejto normy sa ruší
STN EN 14535-2 (28 4011) z decembra 2011

129027

EUROPEAN STANDARD

EN 14535-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2019

ICS 45.060.01

Supersedes EN 14535-2:2011

English Version

Railway applications - Brake discs for railway rolling stock - Part 2: Brake discs mounted onto the wheel, dimensions and quality requirements

Applications ferroviaires - Disques de frein pour matériel roulant ferroviaire - Partie 2 : Disques de frein montés sur la roue, dimensions et exigences de qualité

Bahnanwendungen - Brems scheiben für Schienenfahrzeuge - Teil 2: Brems scheiben, die an einem Rad befestigt werden, Abmessungen und Qualitätsanforderungen

This European Standard was approved by CEN on 14 October 2018.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey 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 14535-2:2019 (E)

Contents		Page
European foreword		3
Introduction		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Symbols and abbreviations	6
5	Requirements	7
5.1	General	7
5.2	Materials, design and manufacture	7
5.3	Dimensions	8
5.3.1	Brake disc	8
5.3.2	Characteristics of dimensions and areas for the fastening	9
5.3.3	Indication of disc wear limits	11
5.3.4	Finishing	12
5.3.5	Balance	12
5.3.6	Dimensional tolerances	12
5.4	Installation	13
6	Test methods	13
6.1	Type tests	13
6.2	Application test	13
7	Quality approval	13
7.1	Verification	13
7.2	Documentation	14
7.3	Traceability	14
7.4	Records	14
8	Designation	14
9	Marking and packaging	16
9.1	Marking	16
9.2	Packing and protection	16
Annex A (informative) Further tests		17
A.1	General	17
A.2	Application test	17
A.2.1	General	17
A.2.2	Bench tests	17
A.2.3	In service tests: validation of the capability for service use	17
Annex ZA (informative) Relationship between this European Standard and the essential requirements of EU Directive 2008/57/EC aimed to be covered		18
Bibliography		20

European foreword

This document (EN 14535-2:2019) 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 September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

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 supersedes EN 14535-2:2011.

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 EU Directive 2008/57/EC.

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

Compared to the previous edition, the following changes have been made:

- a) the standard’s scope has been modified;
- b) normative references have been updated;
- c) terms and definitions have been revised;
- d) requirements on materials, design, dimensions and installation have been revised;
- e) requirements on testing have been revised;
- f) requirements on designation and markings have been revised;
- g) Annexes have been revised.

The EN 14535 series, *Railway applications - Brake discs for railway rolling stock*, consists of the following parts:

- *Part 1: Brake discs pressed or shrunk onto the axle or drive shaft, dimensions and quality requirements;*
- *Part 2: Brake discs mounted onto the wheel, dimensions and quality requirements;*
- *Part 3: Brake discs, performance of the disc and the friction couple, classification.*

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 14535-2:2019 (E)**Introduction**

The requirements given in this document cannot be written in sufficient detail to ensure good workmanship or proper construction. Each manufacturer is therefore responsible for taking every necessary step to make sure that the quality of design, workmanship and construction is such as to ensure accordance with good engineering practice.

1 Scope

This document specifies requirements for the design and dimensions of the brake disc.

This document applies to brake discs mounted onto the wheel, including the wheel web or wheel hub of railway rolling stock.

This document applies to discs having one or more disc brake rings, each having two axially separated friction faces.

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.

EN 13260, *Railway applications — Wheelsets and bogies — Wheelsets — Product requirements*

EN 13261, *Railway applications — Wheelsets and bogies — Axles — Product requirements*

EN 13262, *Railway applications — Wheelsets and bogies — Wheels — Product requirements*

EN 14535-3, *Railway applications — Brake discs for railway rolling stock — Part 3: Brake discs, performance of the disc and the friction couple, classification*

EN 14478, *Railway applications – Braking - Generic vocabulary*

EN ISO 4287, *Geometrical product specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters (ISO 4287)*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN