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Railway applications - Braking - Brake pads

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

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**Railway applications - Braking - Brake pads**

Applications ferroviaires - Freinage - Garniture de frein

Bahnanwendungen - Bremsen - Bremsbeläge

This European Standard was approved by CEN on 15 June 2020.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## **European foreword**

This document (EN 15328:2020) 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of an identical text or by endorsement, at the latest by January 2021, and conflicting national standards shall be withdrawn at the latest by January 2021.

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 has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2016/797/EU.

For relationship with EU Directive 2016/797/EU, see informative Annex ZA, which is an integral part of this document.

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, Turkey and the United Kingdom.

**EN 15328:2020 (E)****Introduction**

This document gives the requirements for the design, dimensions, performance and testing of a brake pad which, as part of a disc brake system, acts on one friction face of a brake disc in accordance with EN 14535-1 and EN 14535-2.

The generic test program can also be used with different program parameter figures for specific project applications. The use of project adapted programs is subject to agreement between the parties involved.

This document contains the requirements for interfacing the brake pads with the rail vehicle, the testing procedures in order to confirm that it satisfies the basic safety and technical requirements, the material control procedures to ensure product quality, reliability and conformity, as well health and environmental requirements are fulfilled.

Each manufacturer is responsible for ensuring that the quality of design, workmanship and construction is in accordance with good engineering practice.

## 1 Scope

This document specifies requirements for pads for disc brakes of railway rolling stock.

The document defines requirements and generic test programs for brake pads on dynamometer. This document does not cover mandatory tests to verify stopping distances in addition to laboratory, bench test and in-service tests. In order to qualify the brake pad performance in accordance with the classification the standard provides fixed parameter figures as categories defined in paragraph classification scheme.

This document is not applicable for urban rail applications.

## 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 14478:2017, *Railway applications - Braking - Generic vocabulary*

EN 14535-1:2019, *Railway applications - Brake discs for railway rolling stock - Part 1: Brake discs pressed or shrunk onto the axle or drive shaft, dimensions and quality requirements*

EN 14535-2:2019, *Railway applications - Brake discs for railway rolling stock - Part 2: Brake discs mounted onto the wheel, dimensions and quality requirements*

EN 14535-3:2015, *Railway applications - Brake discs for railway rolling stock - Part 3: Brake discs, performance of the disc and the friction couple, classification*

EN 16451:2015, *Railway applications - Braking - Brake pad holder*

EN ISO 4287:1998, *Geometrical product specifications (GPS) - Surface texture: Profile method - Terms, definitions and surface texture parameters (ISO 4287:1997)*

UIC 548:2016, *Brakes - Requirements of friction test benches for the international certification of brake pads and brake blocks*

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