Irish Standard
I.S. EN 15734-1:2010

Railway applications - Braking systems of high speed trains - Part 1: Requirements and definitions

I.S. EN 15734-1:2010

Incorporating amendments/corrigenda/National Annexes issued since publication:
EN 15734-1:2010/AC:2013

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NORME EUROPÉENNE

EUROPÄISCHE NORM

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February 2013
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English version
Version Française
Deutsche Fassung

Railway applications - Braking systems of high speed trains - Part 1: Requirements and definitions

Applications ferroviaires - Systèmes de freinage pour trains à grande vitesse - Partie 1 : Exigences et définitions

Bahnanwendungen - Bremssysteme für Hochgeschwindigkeitszüge - Teil 1: Anforderungen und Definitionen

This corrigendum becomes effective on 27 February 2013 for incorporation in the three official language versions of the EN.

Ce corrigendum prendra effet le 27 février 2013 pour incorporation dans les trois versions linguistiques officielles de la EN.

Die Berichtigung tritt am 27. Februar 2013 zur Einarbeitung in die drei offiziellen Sprachfassungen der EN in Kraft.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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1 Modification to 5.4.5.5

In the 1st paragraph, in the 1st sentence, replace "so that uneven wear of the pads (2 mm for sinter) is avoided" *with* "so that uneven wear of the pads (≥ 2 mm for sinter) is avoided".

2 Modification to 5.13

In the 2nd last paragraph, replace the last list item:

"

— diameter brake cylinder pressure: 60 mm."

with:

"

— diameter brake cylinder pressure: greater or equal to 60 mm.".

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This European Standard was approved by CEN on 23 October 2010.

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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 Management Centre has the same status as the official versions.

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Foreword

This document (EN 15734-1:2010) 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 May 2011, and conflicting national standards shall be withdrawn at the latest by May 2011.

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

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 the EU Directive, see informative Annex ZA, which is an integral part of this document.

EN 15734, *Railway applications — Brake systems of high speed trains*, consists of the following parts:

— *Part 1: Requirements and definitions*

— *Part 2: Test methods*

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard describes the functionality, constraints, performance and operation of a brake system for use in high speed trains as described in the TSI High Speed Rolling Stock, operating on routes of the European railways and their infrastructure systems.

The brake system requirements specified in this European Standard apply to trains that may operate at a maximum speed of up to 350 km/h on lines specifically built for high speed and define graduated values for deceleration related to four speed ranges (see Clause 6).

This European Standard covers:

— all new vehicle designs of high speed trains;

— all major overhauls of the above-mentioned vehicles if they involve redesigning or extensive alteration to the brake system of the vehicle concerned.

This European Standard does not cover locomotive hauled trains, which are specified by EN 14198.

NOTE This document applies the functional subdivision into subsystems as specified in the TSI High speed. The braking system is part of the function: “Accelerate, maintain speed, brake and stop”.

2 Normative references

The following referenced documents are indispensable for the application 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 837-1:1996, *Pressure gauges — Part 1: Bourdon tube pressure gauges — Dimensions, metrology, requirements and testing*

EN 854, *Rubber hoses and hose assemblies — Textile reinforced hydraulic type — Specification*

EN 10220, *Seamless and welded steel tubes — Dimensions and masses per unit length*

EN 10305-4, *Steel tubes for precision applications — Technical delivery conditions — Part 4: Seamless cold drawn tubes for hydraulic and pneumatic power systems*

EN 10305-6, *Steel tubes for precision applications — Technical delivery conditions — Part 6: Welded cold drawn tubes for hydraulic and pneumatic power systems*

EN 13749:2005*, Railway applications — Wheelsets and bogies — Methods of specifying structural requirements of bogie frames*

EN 14198, *Railway applications — Braking — Requirements for the brake system of trains hauled by a locomotive*

EN 14478:2005, *Railway applications — Braking — Generic vocabulary*

EN 14531-6, *Railway applications — Methods for calculation of stopping and slowing distances and immobilisation braking — Part 6: Step by step calculations for train sets or single vehicles*

EN 14535-1, *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*