

Irish Standard I.S. EN 14198:2016

Railway applications – Rolling stock systems -Requirements for the brake systems of a train hauled by a locomotive

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#### I.S. EN 14198:2016

2016-12-12

Incorporating amendments/corrigenda/National Annexes issued since publication:

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I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R.~xxx: Standard~Recommendation-recommendation~based~on~the~consensus~of~an~expert~panel~and~subject~to~public~consultation.

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### **National Foreword**

I.S. EN 14198:2016 is the adopted Irish version of the European Document EN 14198:2016, Railway applications – Rolling stock systems - Requirements for the brake systems of a train hauled by a locomotive

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**EUROPEAN STANDARD** 

EN 14198

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

November 2016

ICS 45.040

Supersedes EN 14198:2004

## **English Version**

# Railway applications - Braking - Requirements for the brake system of trains hauled by locomotives

Applications ferroviaires - Freinage - Exigences concernant le système de freinage des trains tractés par locomotive Bahnanwendungen - Bremsen - Anforderungen an die Bremsausrüstung lokbespannter Züge

This European Standard was approved by CEN on 16 October 2016.

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.

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#### EN 14198:2016 (E)

## **European foreword**

This document (EN 14198:2016) 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 2017, and conflicting national standards shall be withdrawn at the latest by May 2017.

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 14198:2004.

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.

EN 14198:2016 includes the following significant technical changes with respect to EN 14198:2004:

- restructure of the whole document (brought in line with TSI);
- new Clause 6 "Performances";
- new Annex A "Vehicle requirements";
- new Annex B "Train related brake performance categories";
- modified clauses: 1 "Scope", 2 "Normative references", 3 "Terms and definitions", 4 "Symbols and abbreviations", 5 "Requirements", Annex C, Annex D;
- deleted clauses: 6 "Test conditions".

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

## 1 Scope

This European Standard specifies basic requirements for the braking of trains hauled by locomotives:

 For trains hauled by locomotives and intended for use in general operation each vehicle is fitted with the traditional brake system with a brake pipe compatible with the UIC brake system.

NOTE This ensures technical compatibility of the brake function between vehicles of various origins in a train (see 5.4).

— For trains hauled by locomotives and intended for use in fixed or predefined formation, the requirements on the vehicle and the train are necessary. In the case of a UIC brake system, this standard applies; if not, the EN 16185 series or the EN 15734 series applies.

If concerned, the UIC brake architecture described in this standard (see 5.4) can be used for brakes for multiple unit train and high speed trains and urban rail described in the EN 13452 series, the EN 16185 series and the EN 15734 series.

This European Standard also takes into account electrical and electronic control functions and additional brake systems like dynamic brakes and adhesion independent brakes.

The brake system requirements, which are specific for on-track machines are set out in EN 14033-1.

This European Standard does not apply to Urban Rail rolling stock braking system, which is specified by EN 13452-1.

#### 2 Normative References

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 286-3, Simple unfired pressure vessels designed to contain air or nitrogen - Part 3: Steel pressure vessels designed for air braking equipment and auxiliary pneumatic equipment for railway rolling stock

EN 286-4, Simple unfired pressure vessels designed to contain air or nitrogen - Part 4: Aluminium alloy pressure vessels designed for air braking equipment and auxiliary pneumatic equipment for railway rolling stock

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 13749:2011, Railway applications - Wheelsets and bogies - Method of specifying the structural requirements of bogie frames

EN 14478, Railway applications - Braking - Generic vocabulary



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