

Railway Group Standard

GE/RT8014

Issue Two

Date June 2011

Axlebox Condition Monitoring – Hot Axlebox Detection

Synopsis

This document mandates requirements for rolling stock and infrastructure subsystems to be applied in the design of new or altered rolling stock for the detection of hot axleboxes, by trackside hot axlebox detectors (HABDs) and onboard axle bearing monitoring systems.

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Railway Group Standard**GE/RT8014****Issue** Two**Date** June 2011**Axlebox Condition Monitoring
– Hot Axlebox Detection****Issue record**

Issue	Date	Comments
One	June 2001	Original document Supersedes GM/RT2242, GM/RT2243, GM/TT0142, GO/OP0006 and GO/RT3207
Two	04 June 2011	Replaces issue one Revised to align with BS EN 15437-1:2009

Revisions have not been marked by a vertical black line in this issue because the document has been revised throughout

Superseded documents

The following Railway Group documents are superseded, either in whole or in part as indicated:

Superseded documents	Sections superseded	Date when sections are superseded
GE/RT8014 issue one June 2001 Hot Axle Bearing Detection	All	03 September 2011

GE/RT8014 issue one ceases to be in force and is withdrawn as of 03 September 2011.

Supply

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Contents

Section	Description	Page
Part 1	Purpose and Introduction	4
1.1	Purpose	4
1.2	Introduction	4
1.3	Approval and authorisation of this document	5
Part 2	Requirements for the Rolling Stock Subsystem	6
2.1	The rolling stock interface for hot axlebox detection	6
2.2	The rolling stock interface to infrastructure	6
2.3	Rolling stock fitted with onboard axle bearing monitoring system	6
Part 3	Requirements for the Infrastructure Subsystem	7
3.1	The infrastructure interface to rolling stock	7
3.2	Provision of information on trackside HABDs	7
Part 4	Requirements for the Infrastructure Manager	8
4.1	Requirements when trackside HABDs are out of service	8
Part 5	Application of this document	9
5.1	Application - infrastructure managers	9
5.2	Application - railway undertakings	9
5.3	Health and safety responsibilities	10
Definitions		11
References		12

Railway Group Standard**GE/RT8014****Issue** Two**Date** June 2011**Axlebox Condition Monitoring
– Hot Axlebox Detection****Part 1 Purpose and Introduction****1.1 Purpose**

- 1.1.1 This document mandates requirements for rolling stock and infrastructure subsystems to be applied in the design of new or altered rolling stock for the detection of hot axleboxes, by trackside hot axlebox detectors (HABDs) and onboard axle bearing monitoring systems.

1.2 Introduction**1.2.1 Background**

- 1.2.1.1 The implementation of the Technical Specifications for Interoperability (TSIs) mandated through a series of European Directives has resulted in a review of all requirements mandated in Railway Group Standards.
- 1.2.1.2 Under the Strategy for Standards Management, RSSB has given a commitment to review all of its standards with a view to mandating only those requirements that define the interface and the need for cooperation between different categories of duty holder to manage risk safely.
- 1.2.1.3 A review of the requirements set out in standards associated with hot axlebox detection has resulted in a revision of this Railway Group Standard.
- 1.2.1.4 GE/RT8270 mandates requirements and responsibilities for the assessment of compatibility between infrastructure and rolling stock. Where existing infrastructure has not been assessed as conforming to the applicable Infrastructure TSIs, conformity with the requirements of GE/RT8014 is a method of demonstrating compatibility between rolling stock and hot axlebox detection systems.
- 1.2.1.5 The requirements in the TSIs for axlebox condition monitoring are supported by BS EN 15437-1:2009. To align with Europe the relevant parts of BS EN 15437-1:2009 that are appropriate for GB are incorporated within this document.

1.2.2 Principles

- 1.2.2.1 The requirements of this document are based on one or more of the following principles:
- a) This document mandates those requirements that define the interface and the need for cooperation between different categories of duty holder to manage risk safely.
 - b) This document mandates requirements that are necessary to support an open point in a TSI and meet an essential requirement of the relevant European Directive.

1.2.3 Support to essential requirements

- 1.2.3.1 The European Directives applicable to interoperability mandate that each TSI is required to address a number of essential requirements. In supporting specific open points in Rolling Stock TSIs, including the as yet unpublished Conventional Rail Locomotives and Passenger Rolling Stock TSI, the essential requirements set out in 1.2.3.2 are addressed.