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**Rolling stock — Axles — Part 1: Quality
requirements**

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Land, Infrastructure, Transport and Tourism through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Association of Rolling Stock Industries (JARI)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14. Consequently **JIS E 4502-1 : 2011** is replaced with this Standard.

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JIS E 4502 series consists of the following 2 parts under the general title *Rolling stock — Axles —*:

Part 1: Quality requirements

Part 2: Dimensional requirements

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Rolling stock — Axles — Part 1: Quality requirements

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 1005-3** : 1982, Edition 1, by changing some of the technical contents in line with unique conditions in Japan.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JB.

1 Scope

1.1 This Standard specifies requirements for the manufacture and supply of axles for tractive and trailing stock (hereafter generically referred to as axles) in accordance with Table 1, Table 1A, and Clause 4.

1.2 In addition to this Standard, the requirements of **JIS G 0404** are applicable.

NOTE The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 1005-3 : 1982 *Railway rolling stock material — Part 3: Axles for tractive and trailing stock — Quality requirements* (MOD)

In addition, symbols which denote the degree of correspondence in contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. For standards with the year indication, only the editions of the indicated year shall be applied and the revisions (including amendments) made thereafter shall not be applied. For those without the indication of the year, the most recent edition (including amendments) shall be applied.

JIS E 4502-2 *Rolling stock — Axles — Part 2: Dimensional requirements*

JIS G 0404 *Steel and steel products — General technical delivery requirements*

NOTE Corresponding International Standard: ISO 404 : 1992 *Steel and steel products — General technical delivery requirements* (MOD)

JIS G 1214 *Iron and steel — Methods for determination of phosphorus content*

JIS G 1215 (all parts) *Iron and steel — Determination of sulfur content*

JIS G 1253 *Iron and steel — Method for spark discharge atomic emission spectrometric analysis*