

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS E 5401-2 : 1998

**Carbon steel tyres for railway
rolling stock—Wheel centres
and tyred wheels—
Dimensional, balancing
and assembly requirements**

ICS 45.060

Descriptors : railway vehicles, unalloyed steels, tyres, steels, wheel centres, wheels,
balancing, assembling

Reference number : JIS E 5401-2 : 1998 (E)

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry and Minister of Transportation through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law.

This Standard, for the purpose of conformity to International Standard, has been prepared based on **ISO 1005-2 : 1994** *Railway rolling stock material—Part 2 : Tyres, wheel centres and tyred wheels for tractive and trailing stock—Dimensional, balancing and assembly requirements*.

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Date of Establishment: 1998-07-25

Date of Public Notice in Official Gazette: 1998-07-27

Investigated by: Japanese Industrial Standards Committee
Divisional Council on Railways and Rolling
Stock

JIS E 5401-2:1998, First English edition published in 1999-10

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

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Printed in Japan

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Carbon steel tyres for railway rolling stock—Wheel centres and tyred wheels—Dimensional, balancing and assembly requirements

Introduction This Japanese Industrial Standard fully employs ISO 1005-2 : 1994, *Railway rolling stock material—Part 2 : Tyres, wheel centres and tyred wheels for tractive and trailing stock—Dimensional, balancing and assembly requirements*, as well as, in a necessary and minimum range of full and wide revision of JIS E 5401 : 1989 *Carbon steel tyres for railway rolling stock*, the provisions of the former Japanese Industrial Standard have been appended in addition.

In the former JIS E 5401 : 1989, the quality requirements and the requirements of shapes and dimensions have been arranged into one standard, since the corresponding International Standards have been divided into two standards of ISO 1005-1 : 1994, *Railway rolling stock material—Part 1 : Rough-rolled tyres for tractive and trailing stock—Technical delivery conditions* and ISO 1005-2 : 1994, in the results of proceeding of conformance on the basis of the style and system of International Standards, instead of the former JIS E 5401 : 1989, JIS E 5401-1 *Carbon steel tyres for railway rolling stock—Quality requirements* and JIS E 5401-2 *Carbon steel tyres for railway rolling stock—Wheel centres and tyred wheels—Dimensional, balancing and assembly requirements* have been established.

At present, tyres are in the tendency to be used for repairing, solid wheels are used for new wheels.

1 Scope

1.1 In this Standard, the dimensional requirements¹⁾, surface roughness and permissible residual unbalance relating to tyres, wheel centres and tyred wheels in the various degrees of finish are specified, and in addition the manufacturing requirements of tyred wheels. However, the tyred special wheels which have used rubber and the like (special structure wheels of sound isolation wheels, elastic wheels) shall be excluded.

Note ¹⁾ The term of “dimensional requirements” shall mean the machining allowance, dimensional tolerances, shapes and positional tolerances.

1.2 The quality requirements for the tyres shall be as given in JIS E 5401-1, and the quality requirements for the wheel centres shall be as given in ISO 1005-4.

1.3 In addition to the quality requirements of this Standards, ISO 404 apply.

2 Normative references

JIS E 4504 *Wheel sets for railway rolling stock*

JIS E 5401-1 *Carbon steel tyres for railway rolling stock—Quality requirements*

JIS E 5402-1 *Carbon steel tyres for railway rolling stock—wheel centres and tyred wheels—Dimensional, balancing and assembly requirements*