

# INTERNATIONAL STANDARD

**ISO**  
**1005-1**

Third edition  
1994-08-01

---

## **Railway rolling stock material —**

### **Part 1:**

Rough-rolled tyres for tractive and trailing  
stock — Technical delivery conditions

*Matériel roulant de chemin de fer —*

*Partie 1: Bandages bruts laminés pour matériel moteur et pour matériel  
remorqué — Conditions techniques de livraison*



Reference number  
ISO 1005-1:1994(E)

## Contents

	Page
1 Scope .....	1
2 Normative references .....	1
3 Information to be supplied by the purchaser .....	1
4 Classification .....	2
5 Requirements .....	5
6 Manufacture .....	5
7 Inspection .....	6
8 Delivery .....	11
9 Guarantee .....	11

## Annex

A Examples of prints (see 7.8.6) .....	12
--	----

© ISO 1994

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization  
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 1005-1 was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 13, *Railway rolling stock material*.

This third edition cancels and replaces the second edition (ISO 1005-1:1982) of which it constitutes a technical revision.

ISO 1005 consists of the following parts, under the general title *Railway rolling stock material*:

- Part 1: *Rough-rolled tyres for tractive and trailing stock — Technical delivery conditions*
- Part 2: *Tyres, wheel centres and tyred wheels for tractive and trailing stock — Dimensional, balancing and assembly requirements*
- Part 3: *Axles for tractive and trailing stock — Quality requirements*
- Part 4: *Rolled or forged wheel centres for tyred wheels for tractive and trailing stock — Quality requirements*
- Part 6: *Solid wheels for tractive and trailing stock — Technical delivery conditions*
- Part 7: *Wheelsets for tractive and trailing stock — Quality requirements*
- Part 8: *Solid wheels for tractive and trailing stock — Dimensional and balancing requirements*
- Part 9: *Axles for tractive and trailing stock — Dimensional requirements*

Annex A of this part of ISO 1005 is for information only.

## Introduction

At present, tyres are preferably used for repairs while new wheels are mainly manufactured as solid wheels. An important market for tyres seems to exist only in Asia and parts of Africa. However, this tendency is decreasing.

This will therefore be the last edition of ISO 1005-1 and it was decided not to include an alignment of tyre grades given in this part of ISO 1005 with the grades of solid wheels in ISO 1005-6.

This document is a preview generated by EVS

# Railway rolling stock material —

## Part 1:

## Rough-rolled tyres for tractive and trailing stock — Technical delivery conditions

### 1 Scope

**1.1** This part of ISO 1005 specifies requirements for the manufacture and supply of rough-rolled tyres for tractive and trailing stock of unalloyed steels in accordance with table 1 and clause 4.

**1.2** In addition to this part of ISO 1005, the requirements of ISO 404 are applicable.

### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 1005. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 1005 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 83:1976, *Steel — Charpy impact test (U-notch)*.

ISO 377-1:1989, *Selection and preparation of samples and test pieces of wrought steels — Part 1: Samples and test pieces for mechanical test*.

ISO 377-2:1989, *Selection and preparation of samples and test pieces of wrought steels — Part 2: Samples for the determination of the chemical composition*.

ISO 404:1992, *Steel and steel products — General technical delivery requirements*.

ISO 1005-2:1986, *Railway rolling stock material — Part 2: Tyres, wheel centres and tyred wheels for tractive and trailing stock — Dimensional, balancing and assembly requirements*.

ISO 5948:1994, *Railway rolling stock material — Ultrasonic acceptance testing*.

ISO 6506:1981, *Metallic materials — Hardness test — Brinell test*.

ISO 6892:1984, *Metallic materials — Tensile testing*.

ISO 10474:1991, *Steel and steel products — Inspection documents*.

### 3 Information to be supplied by the purchaser

The purchaser shall supply the following information in his enquiry and order:

- a) the number of this part of ISO 1005;
- b) the grade of steel (see 4.1 and table 1);
- c) the type of heat treatment (see 4.2 and 6.5);
- d) the dimensions of the tyre (see 5.4);
- e) if microstructure examination is required (see 5.2.2.1 and table 2);
- f) whether the chemical composition may be verified by cast analysis (see 5.1);