
International Standard



1005/2

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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

Matériel roulant de chemin de fer — Partie 2 : Bandages, corps de roues et roues bandagées pour matériel moteur et matériel remorqué — Prescriptions dimensionnelles d'équilibrage et d'assemblage

First edition — 1986-11-15

UDC 629.4.027.4

Ref. No. ISO 1005/2-1986 (E)

Descriptors : railway equipment, railway rolling stock, steel products, tyres, wheel disks, wheels, specifications, dimensions, balancing, assembling, acceptance testing, transportation.

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 1005/2 was prepared by Technical Committee ISO/TC 17, *Steel*.

It cancels and replaces ISO Recommendation R 1005/2-1969, of which it constitutes a technical revision.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Railway rolling stock material — Part 2 : Tyres, wheel centres and tyred wheels for tractive and trailing stock — Dimensional, balancing and assembly requirements

1 Scope and field application

1.1 This part of ISO 1005 specifies the dimensional requirements,¹⁾ the surface roughness and, as appropriate, the permissible residual static unbalance for tyres, wheel centres, and tyred wheels in the various degrees of finish, and in addition the manufacturing requirements for tyred wheels.

1.2 The quality requirements for tyres are given in ISO 1005/1 and the quality requirements for wheel centres are given in ISO 1005/4.

1.3 In addition to the requirements of this part of ISO 1005, the general technical delivery requirements of ISO 404 apply.

2 References

ISO/R 286, *ISO system of limits and fits — Part 1 : General, tolerances and deviations.*

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

ISO 468, *Surface roughness — Parameters, their values and general rules for specifying requirements.*

ISO 1005, *Railway rolling stock material*

— *Part 1 : Rough-rolled tyres 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 — Quality requirements.*

— *Part 7 : Wheelsets for tractive and trailing stock — Quality requirements.*

ISO 1101, *Technical drawings — Geometrical tolerancing — Tolerancing of form, orientation, location and run-out — Generalities, definitions, symbols, indications on drawings.*

3 Information to be supplied by the purchaser

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

- a) the number of this part of ISO 1005;
- b) a dimensioned drawing of the product;
- c) the degree of finish (see clause 4);
- d) the speed regime in which the finished wheel will operate, i.e. normal or high speed (see tables 7, 8 and 9);
- e) where appropriate, the dimensional requirements for wheel centres delivered in the condition "rough machined" and for rough machined portions of wheel centres delivered in the condition "half finished" (see 5.2.1.2);
- f) the dimensional requirements and surface roughness values if they deviate from this part of ISO 1005 (see tables 5 to 8, and 5.1.1, 5.2.1, 5.2.2, 5.3.1.1, 5.3.1.2, 5.3.2 and 5.3.3);
- g) the roughness values if R_v is to be used (see 5.2.2, 5.3.1.2 and 5.3.3.1);
- h) if, for wheel centres and tyred wheels for trailer stock other than freight stock, a maximum static unbalance is required (see 5.2.4.1 and 5.3.4.1);
- j) if, for wheel centres and tyred wheels for tractive stock, a maximum static unbalance is required (see 5.2.3.2 and 5.3.4.2) also the values which shall apply;

1) The term "dimensional requirements" covers machining allowances, dimensional tolerances and tolerances of form and position.