

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1005 / I

RAILWAY ROLLING STOCK MATERIAL

TYRES FOR TRAILER STOCK

Р-1

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 1005/1, *Railway rolling stock material – Tyres for trailer stock*, was drawn up by Technical Committee ISO/TC 17, *Steel*, the Secretariat of which is held by the British Standards Institution (BSI).

Work on this question led, in 1967, to the adoption of a Draft ISO Recommendation based on a corresponding UIC* code.

In January 1968, this Draft ISO Recommendation (No. 1375) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Austria	India	Spain
Belgium	Israel	Sweden
Canada	Italy	Switzerland
Colombia	Korea, Rep. of	Thailand
Czechoslovakia	Netherlands	Turkey
Denmark	New Zealand	U.A.R.
Finland	Norway	United Kingdom
France	Portugal	Yugoslavia
Germany	Romania	
Hungary	South Africa, Rep. of	

Three Member Bodies opposed the approval of the Draft :

Chile
Japan
U.S.A.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in March 1969, to accept it as an ISO RECOMMENDATION.

* Union Internationale des Chemins de fer (International Union of Railways).

RAILWAY ROLLING STOCK MATERIAL

TYRES FOR TRAILER STOCK

1. SCOPE

This ISO Recommendation applies to the manufacture of rough-rolled tyres of non-alloy steel for trailer stock.

2. CLASSIFICATION

The two classes of steel specified in this ISO Recommendation are designated

- class BV 1
- class BV 2

3. CHEMICAL COMPOSITION

The tyres should be manufactured from non-alloy steel* of the following chemical purity :

phosphorus	$\leq 0.05 \%$
sulphur	$\leq 0.05 \%$
phosphorus + sulphur	$\leq 0.09 \%$

4. MECHANICAL PROPERTIES

4.1 Tensile strength R_m

The tensile strength for the two classes of steel should be as follows :

- class BV 1 : between 60 and 72 kgf/mm²;
- class BV 2 : between 70 and 84 kgf/mm².

Narrower ranges coming within the limits shown above may be used if indicated on the order.

4.2 Coefficient of quality C

The coefficient of quality (defined in Table 1 on the following page) should be as follows :

- tyres which have not been normalised : $C \geq 95$ with $A \geq 8 \%$ on a test piece having a gauge length $L_0 = 5.65\sqrt{S_0}$, for class BV 2;
- normalised tyres : $C \geq 109$.

* For this steel, the content of elements other than carbon should not exceed the following limits :

manganese		1.20 %	molybdenum		0.05 %
silicon		0.50 %	vanadium		0.05 %
nickel		0.30 %	copper		0.30 %
chromium		0.30 %			