

# Specifications for Tyres Rhodesia Railways

## Notes to readers

The source documents for this file were held in the National Railways of Zimbabwe Drawing Office in Bulawayo. They were discovered, in March 1998, while I was helping with searching for a complete set of drawings of the 15<sup>th</sup> Class locomotives after No. 398 had been purchased by a private group in New Zealand for eventual export to that country.

The original documents were duplicated copies, hence the slightly indistinct type in some places. These were photocopied (with permission) on to A4 size paper while in the Drawing Office and the photocopies scanned when we were back in New Zealand.

The scanned files have been lightly “Photoshopped” to remove most of the artefacts resulting from the photocopying and scanning processes and to increase the contrast to make them more readable.

Any alterations, amendments or corrections done by hand have all been left in place and this file is a reasonably accurate reproduction of the original.

Alan Bailey  
December 2010

NO. 10/1962

S P E C I F I C A T I O N

for

STEEL TYRES FOR LOCOMOTIVES, CARRIAGES AND  
WAGONS:

LOCOMOTIVE & TENDER TYRES:

1. Locomotive and Tender Tyres are to be manufactured from acid open hearth steel Class "E" but otherwise are to comply with BS 24. Part 2. 1956 Section One. ✓

CARRIAGE AND WAGON TYRES:

2. Carriage and Wagon tyres are to be manufactured from acid open hearth steel Class "D" or "E", as specified on the tender form, but otherwise are to comply with BS 24. Part 2. 1956. ✓  
Section Two.

ANALYSIS:

3. (a) The Steel shall show on analysis not more than 0.050 per cent of Sulphur and not more than 0.050 per cent of Phosphorus. ✓  
(b) The Manufacturer is to supply analysis of each cast for Carbon, Silicon, Manganese, Sulphur and Phosphorus. ✓

DIMENSIONS:

4. The tyres may be supplied black (as rolled), or may be rough machined at the option of the Manufacturer. In either event, the tyres must be in conformity with the dimensions prescribed on the relevant drawing. ✓

PHYSICAL TESTING:

5. Test pieces and all tests are to be strictly in accordance with those laid down in BS 24. Part 2. 1956. The Manufacturer is to bear all costs of such testing whether carried out at his own works or elsewhere. ✓

HEAT TREATMENT:

6. All tyres of Class "D" or "E" steel are to be oil hardened and tempered. ✓

FREEDOM FROM DEFECTS:

7. The tyres shall be free from harmful defects. ✓

HOT STAMPING:

8. The outer face of each tyre is to be stamped when hot in strict compliance with exhibited drawings, to show the identification letters in  $\frac{3}{4}$ " type, and with aluminium paint rubbed into the depression to clarify identification. The class of steel, the letters "R.R.", cast number etc. must be provided in accordance with the drawing. Special care is to be taken to ensue that the stamping is not made nearer to the outside diameter of the tyre than is shown on exhibited drawings.

INSPECTION:

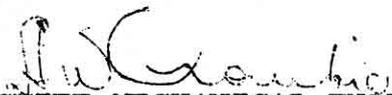
9. The Railway Administration will arrange for inspection, and their Inspector or Representative shall have access to the Manufacturer's works at all reasonable times; and he shall be at liberty to inspect the manufacture at any stage. Material that does not comply with the terms of the specification is liable to rejection.

SHIPPING MARKS:

10. The shipping marks and numbers are to be applied on the inside of the tyre so as to be visible in all conditions of lie or stacking.

PROTECTION AGAINST CORROSION:

11. The tyres are to be given one coat of boiled linseed oil or other approved protective coating thoroughly applied over all surfaces, by hand brushing.

  
CHIEF MECHANICAL ENGINEER.

Mechanical Branch,  
Engineering Division,  
Rhodesia Railways,  
BULAWAYO, S.R.

DATE: 18.1.1962.