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# **RAIL**INFRASTRUCTURE CORPORATION

Discipline

**Rolling Stock Engineering Standard**

Category

**Maintenance**

Title

**Handling, Storage & Transport of Wheelsets**

Reference Number

**RSS 0035**

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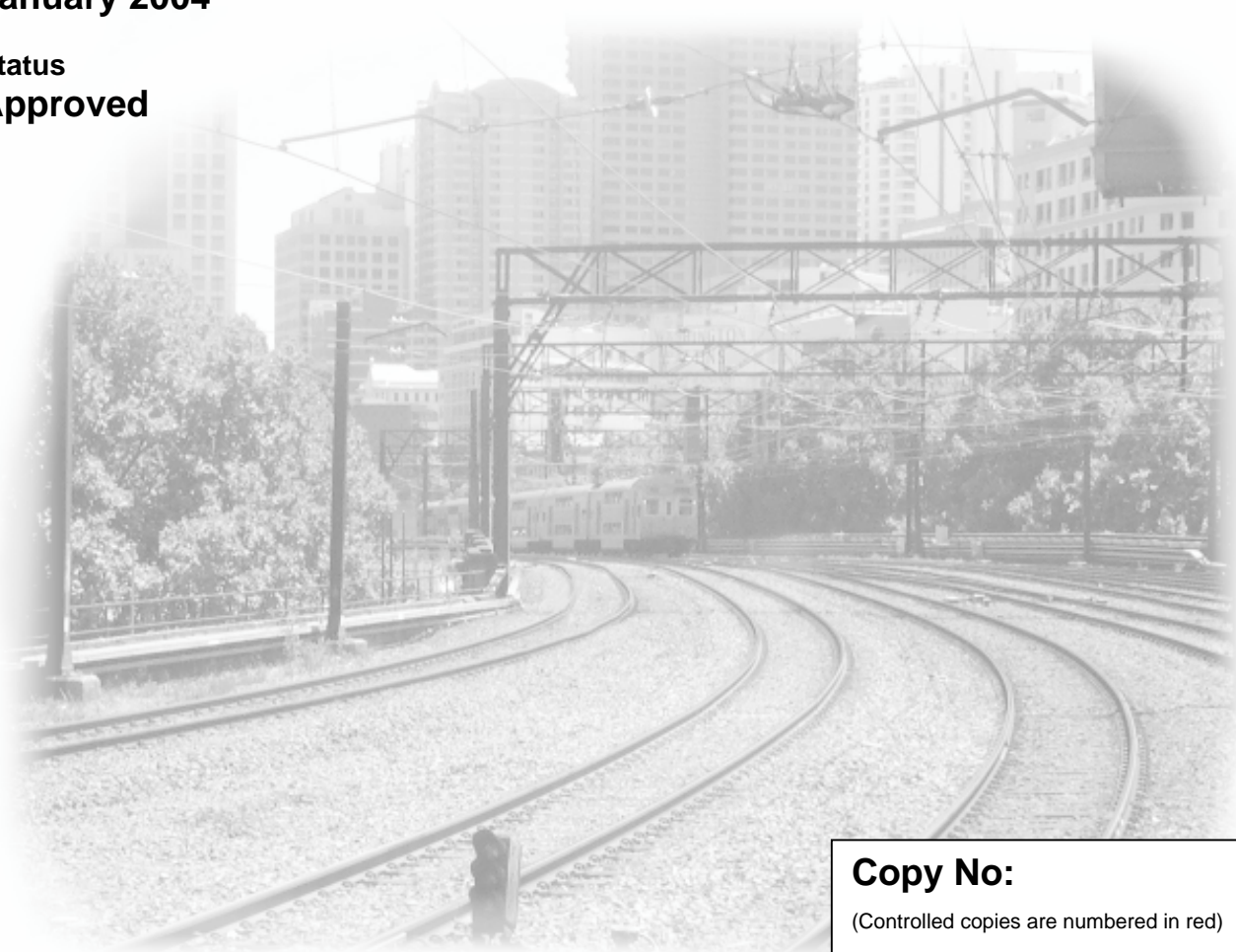
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## **About This Standard**

This standard is based on the following TRS Standard:

TRS 1320 Handling, storage & transportation of wheelsets.

## **Version History**

**Version 1.0**

**January 2004**

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# 1 Scope

This specification covers the handling, storage and transportation of freight wheelsets and bogies.

## 2 Handling

### 2.1 Wheelsets

Wheelsets when handled by crane or forklift shall be handled one at a time.

Appropriate slings are to be used that do not damage bearing journal or wheelseats or axle barrels.

Wheelsets are to be lowered gently so that bruising or other damage to wheel flanges does not occur.

Forklift tynes are not to come into contact with any bearing journals, wheelseats or bearing assemblies.

Forklift tynes shall not cause any bruising, scoring or damage to the axle barrel.

### 2.2 Bogies

Bogies are to be handled one at a time.

Lifting hooks are to be attached only to the lifting lugs (fabricated one piece bogies) or apertures at the end of the sideframes (cast three piece bogies), otherwise, slings shall be used for the transposing of bogies.

Hooks or any other metallic holding devices shall not be used on any area of the bogie frame that is likely to score or notch the surface.

Sufficient hooks or slings are to be used so that bogie components are not misaligned and /or dislodged during lifting.

Prior to any lifting operations, all bogie components shall be firmly attached to the frame (i.e steering arms lashed to the sideframes, hornstays or keeper plates in place etc. ) to prevent damage or dislodgment during the lifting/lowering process.

### 3 Storage

#### 3.1 Wheelsets

All wheelsets are to be stored on normal track (flange to flange) or on specially designed storage rails. See Figure 1. Contact between the wheel flange and bearing cup/axlebox housing is to be avoided at all times.

Wheelsets stored undercover with exposed bearing journals that are not to be used within 7 days must be suitably protected with a rust preventative that will provide protection from corrosion for the entire storage period. For wheelsets stored outdoors a protective non-metallic sleeve material shall also cover the bearing journal.

#### 3.2 Bogies

Bogies awaiting overhaul may be stacked provided there is no damage caused to any of the bogie components. The bogies shall be stored in a safe manner and be restricted to 3 bogies high.

New bogies shall not be stacked unless there is no direct contact between bogies i.e. the use of isolating blocks or cradles should be used.

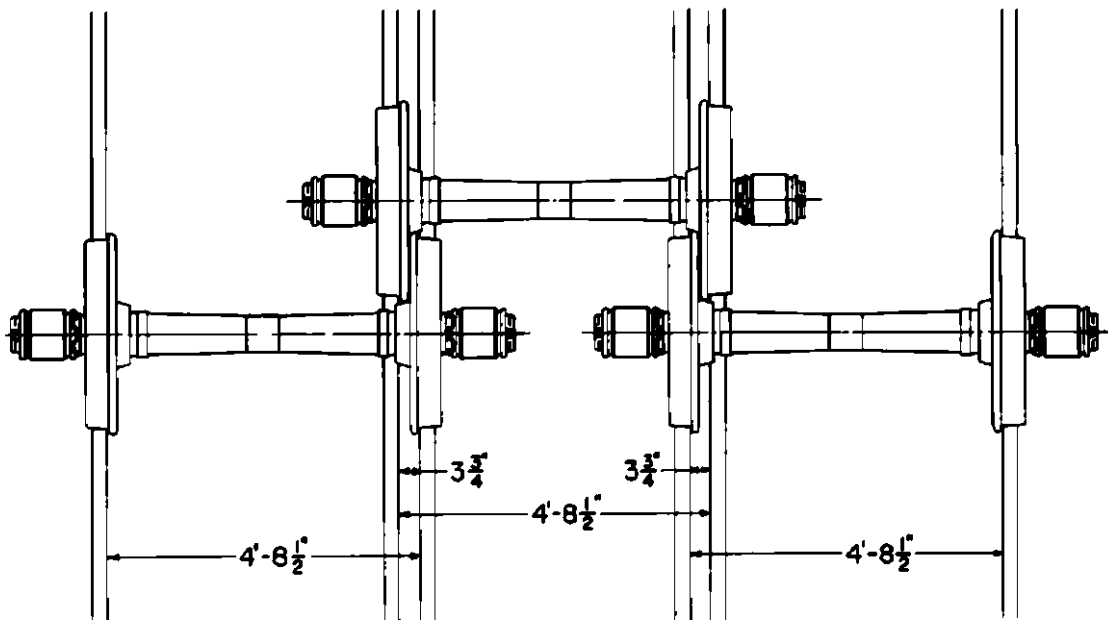


Figure 1



## **4 Transportation**

### **4.1 Wheelsets**

When transporting wheelsets with bearings applied, bearings must not come in contact with wheel flanges or other objects. Special care must be taken when transporting wheelsets by road or rail wagons. Wheelsets being transported by road or rail vehicles must be fully restrained such that the bearing units are not in contact with any other objects. The use of special cradles is recommended.

All exposed bearing journals are to be protected with Tectyl 506 or equivalent. In addition a protective non-metallic sleeve shall cover the bearing journal.

### **4.2 Bogies**

Bogie hold down hooks are to be attached only to the lifting lugs(fabricated bogies) or lifting apertures at the end of the sideframes(cast bogies)where provided, otherwise slings shall be used for lashing down the bogies to the deck of the transport vehicle.

Hooks shall not be used on any area of the bogie frame that is likely to score or notch the surface.

During transportation all bogie components shall be suitably attached to the frame so as to prevent loss or damage during transit .i.e steering arms where fitted to be lashed to sideframes, constant contact sidebearers are to be strapped down to prevent dislodgment etc.

The bogies shall be suitably restrained to prevent the bogie moving in the vehicle during transit. Suitable chocks, cradles or tie downs are to be used.

Bogies may be double stacked provided there is no direct contact between bogies (i.e the use of isolating blocks or cradles should be used).

## **5 Reference Documents**

### **5.1 RIC Standards**