

Bogie Overhaul Service



Unipart Rail provides a high-quality bogie overhaul service to customers from our purpose built base in Doncaster.

Our expertise is expanding to cover all bogie types working to the exacting standards and engineering specifications laid down by the industry.

Our commitment to continuously improve is achieved through the use of the Unipart Way Tools and Techniques that help us to provide the best quality, delivery and cost service available to our customers.

Unipart Rail Doncaster is the first bogie overhaul facility to gain RISAS approval as a standard supplier for bogie overhaul.

"The lead assessor praised Unipart Rail Doncaster for their enthusiasm and commitment to the approval scheme".

RISAS
Railway Industry Supplier Approval Scheme

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Product Bulletin No D103

Wash

Oil, grease and soil are removed using 2 high pressure, hot water, detergent mix pressure washers enabling two bogies to be cleaned at once. The working environment is controlled by ventilation providing 60 air changes per hour. Waste is filtered off into an initial trap for settlement of solids and via a separator to collect hydrocarbons.

Bracket Alignment

Axle box pivot brackets are aligned on the bogie frame to tight tolerances to eliminate axial load in wheel bearings.



Spray Booths

Used for both paint application and curing with a low bake mode, the air assisted paint application system achieves high volume controlled spraying with Copon water-based paint. This produces a high class durable finish, accelerated drying times and low environmental impact.

Dismantle

Raised rails facilitate a comfortable effective working height. Bogies are stripped into component parts using mechanical and hydraulic pullers to maintain component integrity.

All components are sorted into Internal/external repair or scrap and are placed directly into appropriate containers eliminating the need for re-handling and minimising lead-time and float requirements.

Secondary Suspension Air Bag Tester

Designed and built specifically to test the air bag prior to final assembly this enable any defects to be identified and rectified prior to reaching the later assembly stages.

Assembly

Equipped with a manipulator, raised rails and a Faro Arm to complete the alignment process, our flexible assembly areas are organised with dedicated tools. Materials are provided in kits to reduce the amount of movement and transportation required during the assembly process.

Shot Blast

Components are blasted in our purpose built shot blast facility. Two bogie frames can be processed simultaneously.

G17 chilled cast iron grit gives an SA2 profile finish. Grit is filtered and recycled during operation enabling a continuous shot blasting process.

Bolster Jig

We use specially designed handling equipment, including the bolster jig, to ensure that bogie parts travel smoothly through the process to further protect component integrity.



Bogie Press and Wheel Weighting

The bogie press comprises a twin ram hydraulic configuration with a 17 tonne per ram max load. Simulated loads are applied to each side of the bogie. A twin ram and 4 identical wheel load cells are used to accurately set the wheel load distribution and enable the bogie height to be set to the individual vehicle type.



Manipulators

Purpose designed and built for 360° rotation with changeable spigots enabling flexibility for mounting various bogie types. Manipulators lift and lower bogie frames to enable the inspection, repair and assembly to be carried out safely and efficiently without risk of damage to the frames.

Spring Tester

This equipment is designed to measure both Chevron and Coil springs. With a maximum load of 6 tonnes, the force applied is displayed in kN on a digital readout to accurately determine spring integrity and packing heights.

Despatch and Delivery

Prior to despatch all bogies are inspected, strapped and sheeted to prevent damage during transit.

All documentation, C of C, despatch note and copies of relevant NDT certificates are provided in a pack for the convenience of our customers.

Our carrier, Bibby Distribution, works in partnership with us to deliver the bogies to customers' exact timing requirements, ensuring a first class logistics service.