



Our service for your freight wagons

DB Fahrzeuginstandhaltung

Comprehensive service

Diverse solutions

Superior performance



As one of the most efficient full service providers for rail vehicles in Europe, DB Fahrzeuginstandhaltung has the required capacity, the necessary experience and the advanced technology required to provide you with the optimum maintenance of your rolling stock fleet.

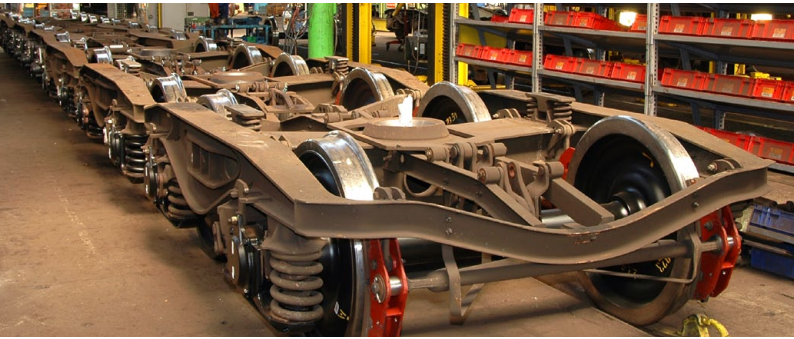
Whether you require a general overhaul, repairs following an accident or the reconditioning of components, we know what needs to be done and offer a wide range of services that extend over the entire life cycle of your freight wagons.

Full service

Our competitive full service portfolio for freight wagons provides all the repair services you require from a single source. As well as providing heavy maintenance and mobile services, we work closely with our partner workshops throughout Europe to provide you with maintenance during ongoing operation.

Our full-service offerings at a glance:

- **Heavy-duty maintenance including component reconditioning**
- **Organisation of maintenance during ongoing operation**
- **On-site preventive and corrective measures such as inspection, periodic inspections, functional testing, ultrasonic testing, train protection inspection and cleaning**
- **Brake inspection and periodic inspections**
- **Mobile service**
- **Mobile preventive and corrective measures**
- **Maintenance and railway operation services, such as fleet management**



Bogies

We offer a comprehensive overhaul service for bogies as well as professional refurbishment of accidental damage of all kinds, reprocessing and repairing all components based on their current condition. All bogie reconditioning and repair services – from consulting and accident assessment through to completion of all necessary work – are provided from a single source. Our state-of-the-art maintenance techniques ensure that we meet the high technical requirements for bogie reconditioning.

Depending on the design of the freight wagon bogie, we perform the following maintenance steps:

- Dismantle and clean
- Inspect pneumatic, electric and mechanical assemblies for signs of wear
- Measure
- Perform non-destructive testing such as magnetic particle inspection
- Repair damaged components based on the damage ascertained
- Inspect the brakes
- Inspect the bogie frames for torsion and other problems and perform straightening work if necessary
- Conduct a crack-detection test at the weld seams and restore or refurbish if necessary
- Apply paint

Wheelsets

We are specialists in the reconditioning, general overhaul and condition-based maintenance of carrying wheelsets for any rail-borne vehicles. State-of-the-art systems operated by a qualified team are ready and available to cater to specific customer needs and requirements.

Our portfolio includes:

- Incoming inspection
- Cleaning
- Testing and measuring
- Ultrasonic, eddy current and magnetic particle testing of wheels, wheel and brake discs, shafts and brake parts
- Execution of disc, shaft and final pressing work for train wheels, wheel and brake discs and axle shafts
- Profile turning of re-tyred and used wheelsets, rims and brake discs
- Inspection and repair of wheelsets
- Metal spraying and welding of wheels, bore holes, shafts and bearing seats
- Axle bearing analyses

Trapezoidal springs

We overhaul and inspect all trapezoidal springs for freight wagons. Specifically, the springs are reconditioned and inspected in accordance with VPI module 05 and the associated technical values (drawings, technical documentation).

Our service portfolio includes:

- Inspections (based on operating hours)
- Repairs, to include the following:
 - Complete dismantling and reassembly of trapezoidal springs
 - Inspection of component parts
 - Reconditioning or replacement of component parts
 - Surface preservation with Elaskon



Braking systems and brake components

We are specialists in reconditioning, repairing, modernising and inspecting a wide range of brake components by different manufacturers. We are also familiar with the processes and procedures applied to recondition components and inspect all pneumatic brake parts found on rail vehicles in line with the conditions established by the UIC.

Our portfolio includes work on the following components:

■ Distributors

- Dismantle and clean
- Recondition and exchange replacement parts
- Perform a final inspection at our test centres

■ Slack adjusters

- Recondition on a takt-based production line
- Modernise design
- Apply paint and accurately label components

■ Brake cylinders

- Recondition on a takt-based production line
- Assess condition and compile findings report (as requested)
- Inspect in automatic test centres

- **Small components** (relief valves, air shut-off cocks, pressure regulators, hose connections, coupling hoses

and windscreen wiper drives):

- Recondition small components for railway vehicles
- Repair or replace components
- Recommend alternatives if reconditioning work does not prove cost effective

Buffer and draw gear

We repair approximately 18,000 buffers every year for Deutsche Bahn and other railway operating companies and can repair a diverse range of buffer types and draw gear. Our sophisticated logistics system also allows us to meet supply needs when even higher requirements are involved.

Our portfolio includes:

- Buffer repair on a takt-based production line
- Repair of various types of draw gear
- Non-destructive material tests

Upgrades and redesigns

We offer you modification, modernization as well as redesign projects of all vehicle classes:

- Project planning and management of the entire project
- Design and engineering together with partners from the DB Group
- Design tests (for example through passengers) and prototyping
- Complete redesign and scheduling into your operations
- Approval and acceptance following redesign



Contact

DB Fahrzeuginstandhaltung GmbH
Weilburger Straße 22
60326 Frankfurt am Main, Germany

sales-fzi@deutschebahn.com
www.db-fzi.com

© Photos: DB AG, Bundeswehr

Last updated April 2017