

Beyond wheelset solutions



Your partner for wheelset solutions



INTEGRAL WHEELSET SOLUTIONS

At CAF MIIRA, we are dedicated to being your global leader in providing cutting-edge Integral Wheelset Solutions. Our commitment extends from the heart of the rail industry, offering innovative engineering, manufacturing, and maintenance solutions for complete wheelsets and portal axles, for all types of trains.

Our solutions are designed to streamline supply chain management and reduce the carbon footprint, contributing to a greener and more sustainable future. By manufacturing the main elements of the wheelset interna-

lly, we ensure full traceability throughout the assembly process, enabling you to monitor your parts with versatility and precision.

A committed and highly qualified team, with strong leadership capabilities, focuses on customer satisfaction, continuously driving innovation and excellence in every project. Together, we strive to exceed expectations and achieve shared success.

Forward together.

WHY CHOOSE CAF?

- Reduced lead times and improved logistics efficiency
- Reliability, efficiency, and cost-effectiveness

- Decreased total weight of the complete solution
- Minimized carbon footprint



Green e-Energy

100% renewable certified e-Energy, produced by wind turbines.

Sustainable, Infinite.

ECO design

More efficient designs that are lighter, require less maintenance and offer longer lifetimes.

Complete wheelset and gearbox designs that eliminate compatibility related problems, maximizing the reduction of total weight.

Efficient. Lightweight.

ECOmmited

Part of SBTI (Science based targets initiative) and Race to Zero initiatives against climate change aligned with the Paris Agreement.

Focus on continuous improvement to reduce carbon footprint throughout the entire life cycle of our products.

Endless improvement.

ECOnsumption

Lightweight designs that require less material and generate less waste.

Production and supply of complete wheelsets generate less carbon footprint: we avoid unnecessary operations and transports.

Integral. Clean.

Circular ECOnomy

100% of the scrap generated by our products is used to produce the steel we use. No additional external resources needed.

Reusable packaging system.

Recyclable.

Green Steel

Green Steel wheels and axles. Our steel is below Standards in terms of generated GHG intensity and below industry average.

Responsible. Green.

CAF GROUP

At CAF MIRA, sustainability is not just a commitment; It is our core philosophy. As a part of the CAF Group, we adhere to the highest global sustainability standards.

Being part of the CAF Group means we are aligned with a global leader in sustainable mobility solutions. We not only meet but consistently exceed sustainability requirements, demonstrating our unwavering dedication to a cleaner, eco-friendly future.

From product inception to end-of-life, sustainability guides our every decision. We use materials and processes that meet European standards, keeping greenhouse gas emissions below industry averages.









CERTIFICATIONS

Our quality systems are rigorously tested and currently comply with major international standards and regulations.

PRODUCT & MANAGEMENT SYSTEM

QUALITY

- ARR
- ISO 9000
- IRIS
- ISO 1725
- RISAS
- VPI

SAFETY

UNE

TSI

TSI

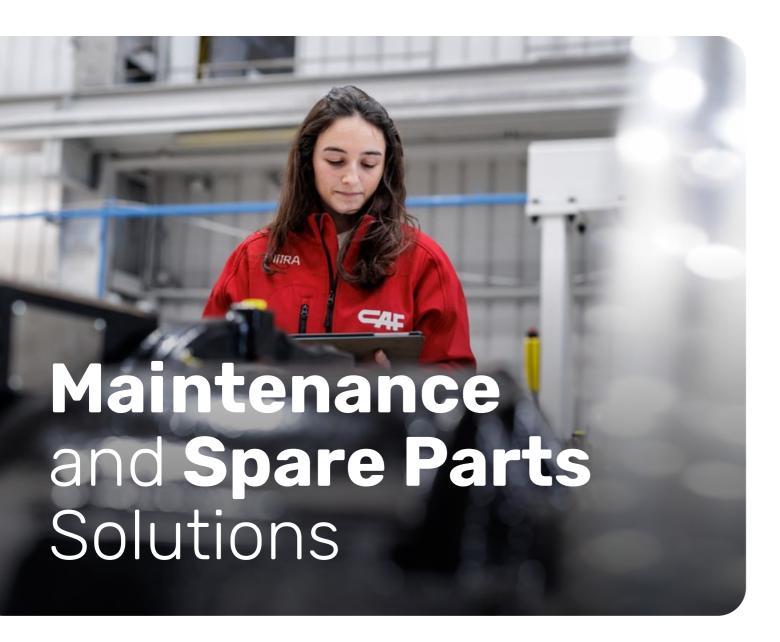
ESG

Sustainability & Environment

- CDP
- EPD
- IS014001
- IS026000
- RACE TO ZERORAILSPONSIBLE
- ECOVADIS PLATINUM
- Labour health & safety

• 45001





COMPREHENSIVE SOLUTIONS FOR RAILWAY MAINTENANCE AND SPARE PARTS

CAF MIIRA is at the forefront of delivering comprehensive maintenance and spare parts solutions tailored to meet the dynamic needs of the railway industry. Our commitment to excellence, innovation, and reliability ensures that your fleet remains operational, efficient, and safe.

We offer a wide range of services designed to minimize downtime and maximize performance, including:

- Maintenance Services
- Technical Assistance
- Spare-Parts Supply Services
- Spare-Parts Engineering Services

With a focus on quality and customer satisfaction, CAF MIIRA is your trusted partner in railway maintenance and spare parts solutions.

MAINTENANCE SERVICES

Keeping Your Fleet Running Smoothly

Our maintenance services are designed to ensure your equipment operates at peak performance, day in and day out. We provide comprehensive support through:



All-in Guarantee

Ensuring top-quality care and attention for optimal performance and longevity



Preventive Maintenance Services

Proactive maintenance to maximize uptime and reliability



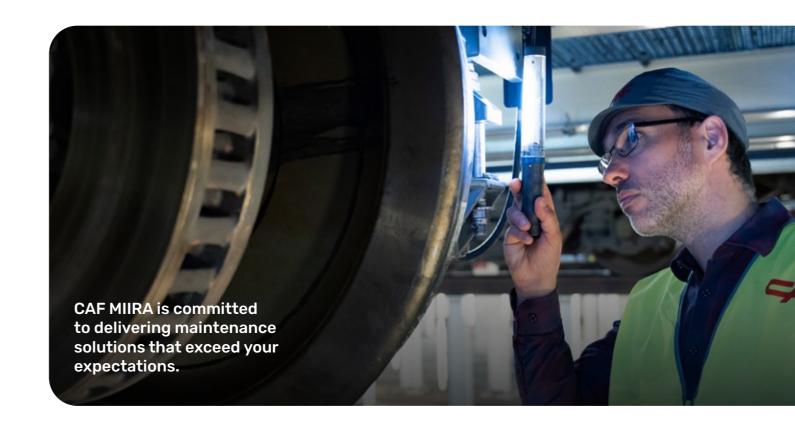
Routine Inspections

Maintaining high standards of quality and safety



Corrective
Maintenance
Services

Swift solutions for equipment issues or failures







PREVENTIVE MAINTENANCE AND ROUTINE INSPECTIONS

Proactive Maintenance for Optimal Performance

Our preventive maintenance services are conducted by skilled CAF MIIRA personnel at client facilities. By adhering to scheduled maintenance routines, we minimize the risk of unexpected failures and costly downtime.



PREVENTIVE MAINTENANCE SERVICES:

- Maximize equipment uptime and reliability
- Minimize unexpected failures
- Conducted by skilled personnel at client facilities



ROUTINE INSPECTIONS:

- Ensure equipment operates smoothly
- Meet regulatory requirements
- Conducted by experienced professionals to uphold the highest standards of quality and safety

CORRECTIVE MAINTENANCE SERVICES

Swift and Effective Corrective Maintenance

In the event of equipment issues or failures, our corrective maintenance services provide swift and effective solutions. With One-Stop Shops strategically located across Europe, we offer convenient access to expert maintenance and repair services for integral wheelsets.



CORRECTIVE MAINTENANCE SERVICES:

- Swift solutions for equipment issues or failures
- Strategically located One-Stop Shops across Europe
- Minimize downtime and restore equipment functionality promptly



TECHNICAL ASSISTANCE SERVICES

Empowering Your Maintenance Teams

At CAF MIIRA, we provide comprehensive technical assistance services to empower operators and maintenance teams with the knowledge, tools, and support they need



TRAINING PROGRAMS:

Comprehensive Training: Equip maintenance operators with necessary skills and knowledge

Hands-On Experience: Practical sessions for maintenance personnel to familiarize with procedures

Manufacturer Expertise: Share valuable insights and best practices for quality and safety

SPECIAL TOOLING DESIGN AND SUPPLY:

Customized Tooling Solutions: Design and manufacture custom tools for specific project needs

Precision Engineering: Create high-quality tools for optimal performance and reliability

Quality Assurance: Rigorous testing and validation to ensure functionality and safety

MAINTENANCE ENGINEERING AND LEAN IMPLEMENTATION

Expert Engineering and Continuous Improvement

Our maintenance engineering services and Lean implementation are designed to optimize your maintenance operations





MAINTENANCE ENGINEERING SERVICES:

Workshop Design: Define and implement efficient workshop layouts

Machinery Selection: Assist in selecting suitable machinery and equipment

Process Optimization: Analyze and optimize maintenance processes for efficiency and quality



LEAN AND KAIZEN IMPLEMENTATION:

Lean Principles Integration: Eliminate waste and improve efficiency

Kaizen Continuous Improvement: Foster a culture of continuous improvement

OEE Monitoring and Enhancement: Assess and improve maintenance operations

Cost Reduction Strategies: Develop strategies to reduce operational costs



SPARE-PARTS SUPPLY SERVICES

Reliable Spare-Parts Supply for Uninterrupted Operations

Our spare-parts supply services are designed to ensure the uninterrupted operation of your railway fleet.



CUSTOMIZED SPARE-PARTS CONTRACTS (TSSSA):

Tailored Solutions: Design customized contracts for planned component deliveries or full-service agreements.

High-Level Storage: Ensure highest standards of component storage.

Professional Logistics: Efficient and timely delivery of spare parts.

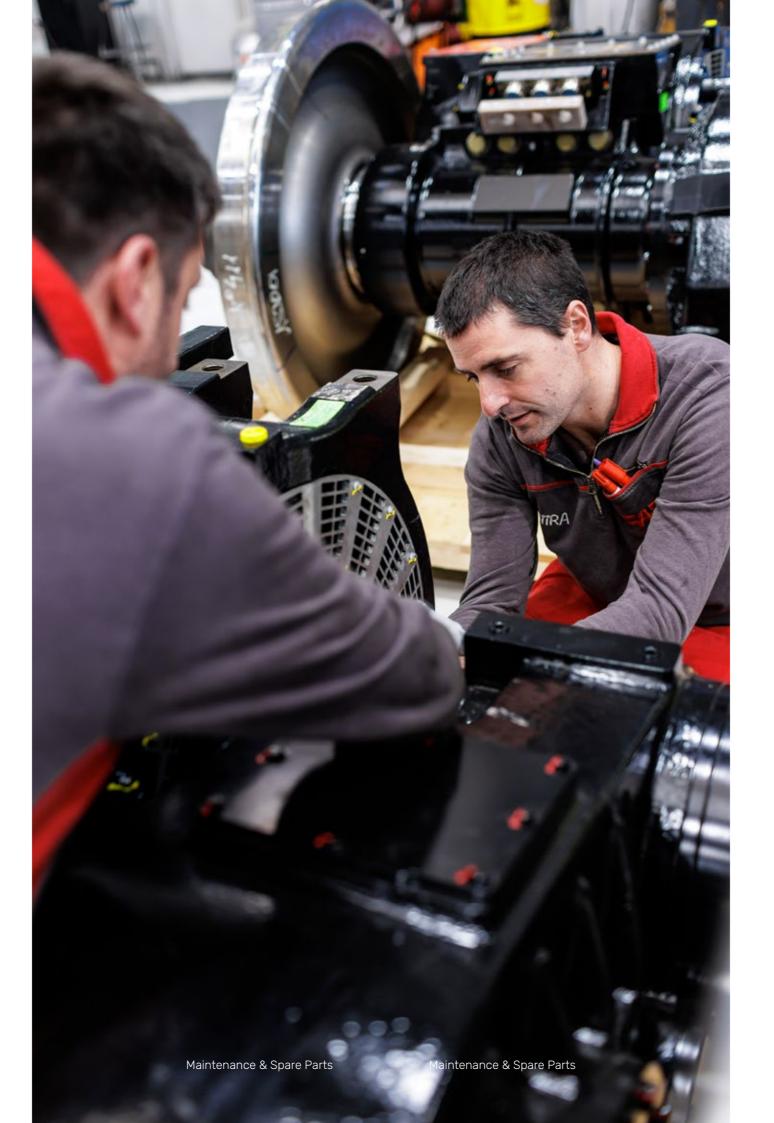


SPOT SPARE-PARTS ORDERS:

Responsive Solutions: Address immediate maintenance needs promptly.

Stock Availability: Expedite shipping for in-stock parts.

Quality Assurance: Manage procurement to guarantee highest quality and authenticity.



SPARE-PARTS ENGINEERING SERVICES

Innovative Solutions for Spare-Parts Engineering

Our spare-parts engineering services are designed to maintain optimal performance and longevity of your railway assets.



REVERSE ENGINEERING SERVICES:

Experience and Expertise: Maintain products from other OEMs.

Comprehensive Analysis: Thorough analysis of components.

Precision Engineering: Manufacture new parts equivalent to originals.

Modernization and Fleet Renewal: Offer cost-effective solutions for discontinued components.



OBSOLESCENCE MANAGEMENT:

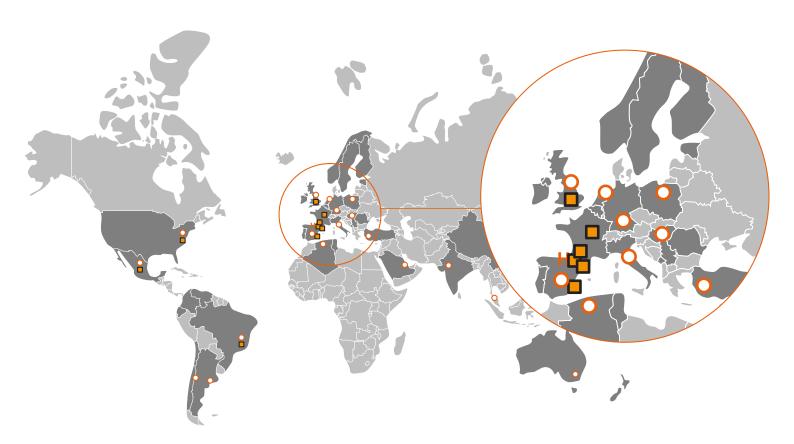
Proactive Approach: Identify and manage product obsolescence risks.

Risk Mitigation: Ensure continuity with homologated spare parts.

Seamless Maintenance: Minimize disruptions with effective management strategies.

Long-Term Reliability: Deliver reliable spare-parts engineering services for long-term asset reliability.

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Headquarters

Production Plants

Offices

Countries with ongoing projects

Headquarters:

• SPAIN

Production Sites:

- SPAIN FRANCE
- USA BRAZIL
- MEXICO UK

Subsidiaries:

- MADRID PARIS LONDON
- MUNICH WASHINGTON D.C.
- NEW DELHI MEXICO D.F.
- ROME SYDNEY WARSAW
- SAO PAULO BUENOS AIRES
- ISTANBUL ROTTERDAM
- DOHA KUALA LUMPUR
- SANTIAGO DE CHILE
- BUDAPEST









