Technology & Product Solutions

Technology and Product Solutions for Rail Infrastructure, Signalling and Rolling Stock
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Unipart Rail - a wealth of world class rail products and technologies across infrastructure, signalling, rolling stock and train operations. High quality, industry compliant rail products delivered where you need them, when you need them and in the format required. Products that help you deliver and perform punctually, professionally and profitably.

Less a question of whether we can help - more a question of how.

Traction & Rolling Stock

Train and freight operators, train builders, maintainers and rolling stock leasing companies the world over benefit from our rolling stock products, components and supply chain efficiencies.

Using us a single source supplier for all refurbishment and maintenance rail components and products means you both reduce deliveries and simplify order processing. We can also provide kits of equipment so that all job materials arrive on one pallet.

Aligning materials delivery with work programmes, organising off site buffer stocks and accurately forecasting future demand patterns also makes sure you always get the products you need, when you need them.

Traction and Rolling Stock (T&RS) product availability includes interior and exterior components, consumable components, heavy engineering and workshop products.

Signalling & Traffic Management

For signalling and traffic management we offer consultancy, design, manufacture and the supply of signalling products.

Unipart Dorman take care of design and manufacture of innovative Rail and Traffic Management products. Extensive product ranges available throughout the UK and in more than 30 other countries. Products include a complete range of LED signals and solutions for all aspects of Railway Signalling, Traffic Management solutions, Hazard Warning lamps and Vehicle Activated Signs.

Through our subsidiary Park Signalling, we provide a range of performance enhancing and life extending services and products for signalling systems. Park covers the lifecycle of signalling systems spanning design and development, application engineering, prototype manufacture, repair and consultancy.

Our service centres provide repair and overhaul services for signalling equipment, as well as assembly and pre installation testing services for signalling equipment such as Location Cases and REBs. We also provide supply chain solutions to the leading OEMs and contractors to help them deliver signalling projects on time and to budget.
Technology & Product Solutions

What we offer

All our products are supported by a comprehensive service offering:

**Optimised Delivery of materials** - the products you need, when you need them, in the format you need them. Off-site buffer stocks and accurate demand forecasting deliver products as required. Format planning means they’re delivered as required including pre-assembled, modular, plug and play and kit options.

**Safety and Incident Management** - a turnkey Safety & Incident Management service means that we can quickly identifying parts and supply chain failure to manage risk and handle challenging technical issues. The sooner they’re identified, the sooner they can be resolved.

**Engineering Product Support** - perfectly placed between supplier and client we offer enormous value in thorough and ongoing technical support, project management and product improvement services. Support that boosts product reliability, quality, and quickly identifies innovative product improvements.

**Warranty and Reliability Management** - efficient warranty and reliability processes that save money, increase availability and improve your network performance.

**Quality and Risk Management** - essential engineering change and control systems for high risk products and services. Using proven systems and risk reduction activities we apply a complete process for determining and resolving quality concerns.

**Product Innovation** - we work with academic and industrial partners to bring new innovation to the rail sector. Commercially viable technology and processes all designed to deliver against the four Cs – customers, cost, carbon and capacity.

**Asset Management** - not only can we provide rail products our Condition Based Maintenance, Overhaul and Repair, Obsolescence Management and Asset Recovery significantly improves asset lifecycle management.

Why work with Unipart Rail

We address the challenges of the rail industry across the asset life cycle by working collaboratively with our partners to deliver technology and supply chain solutions that improve performance, reduce risk and optimise cost.

Perhaps it’s the fact that we’ve invested and continue to invest so heavily in people, in systems and infrastructure, the service centres and customer and supplier distribution networks to keep you, efficient and effective.

Maybe it’s because of our deep and broad rail sector knowledge. Or that we have an intimate understanding of railway equipment, of compliance, of railway standards and the necessary legal and safety requirements.

It could be because we understand the regulatory environment, the importance of high industry safety standards and can help you deliver to your customers with absolute confidence.

In reality though, it’s a combination of all these important, industry essential factors.

Non-negotiables that see us work in close collaboration with suppliers and customers to deliver the quality and consistency you deserve. Every component specified correctly. Every component to standard. Every component supported.
Manufacturing

Unipart Rail develops and manufactures an unrivalled range of replacement railway equipment. Innovative, high quality, high performance equipment designed to help deliver and sustain the world’s best rail operations.

Underpinned by the Unipart Way we supply electronic, mechanical and optical rail products for rail companies the world over.

Our manufacturing services cover:

**Specialist component and systems manufacture** - single items, key large system components and entire complex system manufacture and supply. If you need a system improved or need a system design sourced, built, packaged and distributed then speak to us.

**Legacy manufacturing** - sometimes suppliers go out of business. Or parts stop being economically viable to produce. If you’re struggling to source a product or want to transfer a current manufactured part - talk to us. Not only do we manufacture discontinued parts… we improve them.

**Offsite factory** - rail infrastructure projects are costly… especially if the project overruns. Our ‘offsite factory’ concept makes the process as simple and cost effective as possible. Completing as much system wiring, pre-assembly and testing before dispatch reduces both track-side complexity and commissioning times.

We’ve already delivered a range offsite factories including facilities for Level Crossings and Overhead Line. How can we help you save time and save money too?

Asset Management

Expert provision of ongoing support to better manage assets through their full lifecycle. Including:

**Condition based maintenance (CBM)** - we work closely with suppliers and customers to not only deliver the many benefit of condition based maintenance but to extend both the concept and benefits across the condition based supply chain.

Alongside subsidiary company ‘Instrumentel’ our CBM includes wide ranging remote condition monitoring. Our web based portal – Paradigm Insight turning data into actionable meaning used to drive predictive maintenance regimes.

**Repair and overhaul** - our overhaul facilities breathe new life into more than 5,000 railway materials. From complete bogies (through our JV, LUR) to individual relays. Equipment serviced, repaired, refurbished and overhauled as new - warranted and industry compliant. From damaged, broken, life-expired or ‘heavy maintenance stage’ systems, assemblies and parts, to electrical, electronic, hydraulic and mechanical equipment, ‘repaired and returned’ or ‘service exchanged’. Because we understand railway equipment it means we know exactly what it takes to service, refurbish and overhaul it safely. Compliance, railway standards and essential legal and safety requirements too.

**Obsolescence management** - we collaborate with customers and suppliers to manage obsolescence as part of whole-life monitoring or bespoke assessment.

A proactive approach that:

- Identifies risk products and mitigates current and future risks of failure in service
- Reduces through-life support costs by optimising reliability and availability
- Avoids expensive reactive obsolescence resolutions through early customer collaboration to identify risks and solutions
- Where replacement parts are required, we can reverse engineer products as well as develop and supply new and improved products, in fact we’ve resolved issues for over 500 obsolete parts.

**Asset recovery** - equipment recycling specialists we review, audit, assess, manage and store any surplus to requirements materials, whether trackside, depot store or end of project.
Innovation

Innovation, whether for ourselves or for the wider benefit of the rail sector, lies at the heart of our business.

From developing and trialing new products, improving existing assets, resolving obsolescence issues or responding to regulatory changes, Unipart Rail delivers industry leading rail innovation. New rail sector efficiencies focused on the four Cs - customer satisfaction, capacity increase, cost reduction and carbon reduction.

Unipart Rail Innovation:

- Close customer collaboration that fosters innovative new ways to help address technical and business challenges
- A long term view for investment in research and development to develop future solutions
- Work across commerce and academia to nurture innovations from conception to commercialisation.

Unipart Rail - where innovation meets the market. Why partner with us?

- International routes to market
- Extensive knowledge of railway systems and operation
- A key understanding global market issues
- Access to R&D resource and funding streams
- Reduced costs of participation in research projects
- Access to an extensive global supply chain network to offer competitive manufacture and supply
- Active members of all leading industry associations
- Product design and analysis using state of the art CAD systems
- Production of manufacturing drawings and supporting documentation
- Rapid prototyping to develop concepts into functional models
- Testing and commissioning of products and systems
- Full compliance approvals and certification management service
- Project management from concept to implementation
- Commercial frameworks underwritten with major customers.

A proud member of The UK Rail Research and Innovation Network (UKRRIN). The key collaborative UK Rail industry initiative between academia and industry

Through our involvement with UKRRIN we are creating an innovation hub to help SMEs bring new products and technologies to market.
The Unipart Rail Technology & Products Solution Components

We address the challenges of the rail industry across the asset life cycle by working collaboratively with our partners to deliver technology and supply chain solutions that help them manage:

**Cost** - We will work with you to optimise your costs whether it’s new technology or supply chain enhancements and process improvements. Our focus on cost is continual and by working with us, our customers know that we will help them optimise their costs.

**Risk** - We will help you reduce and mitigate risk - important to ensuring the safety of people, and successful delivery of operational activities. Our ability to mitigate your is underpinned by our deep understanding of the rail sector and the investment we the made in our people, systems and processes.

**Performance** - Improved asset performance, reduced waste, improved operational performance, continually improving processes. All the result of working with us.

**Safety** - You can rest assured we take safety seriously – considering safety is at the heart of everything we do. Ensuring the safety of rail workers and the general public is our number one priority.

**Corporate Responsibility** - We recognise the importance of corporate social responsibility to your business, and we will help you meet your aspirations in the marketplace, the environment, the community and in your workplace.
All our products are supported by a comprehensive service offering

- Engineering Product Support
- Quality & Risk Management
- Safety & Incident Management
- Warranty & Reliability Management
- Optimised Delivery of Materials
- Product Innovation
- Manufacturing
- Asset Management
- Condition Based Maintenance
- Repair and Overhaul
- Obsolescence Management
- Asset Recovery

**Digital** - Digital technology offers new possibilities for rail sector - We will support and guide you in implementing radical new digital solutions to improve your performance - delivering Industry 4.0 systems through to condition based maintenance and enhanced customer experience.

**Innovation** - We deliver added-value innovation in products and services that will transform and sustain your business.
About Unipart

The Unipart Group is a leading UK manufacturer, full service logistics provider and consultant in operational excellence. Operating across a range of market sectors, including automotive, manufacturing, mobile telecoms, rail, retail and technology, Unipart offers a breadth of services to a wide range of blue chip clients internationally.