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CENTRIFUGE

Business News

Spring 2025

We **innovate** to solve **global** infrastructure challenges



Touch for further information

inform

Emergency Assistance

Next time you're at one of the participating stations, don't hesitate to check out a Welcome Point if you need assistance or information.

You'll find them at locations across the UK including:

- Huddersfield
- Manchester Airport
- Scarborough
- Harrogate
- St Erth
- Stroud
- Sunderland
- Farringdon
- Willesden Junction
- Hastings
- Tonbridge
- Gatwick Airport
- Blackpool
- Deansgate
- Norwich.

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ABOUT L.B. FOSTER COMPANY

Our areas of influence and business in numbers



In January 2025, Anthony Thompson, Senior Business Development Manager at L.B. Foster, proudly presented Lilian Greenwood MP with an award. The presentation was in recognition of her valuable involvement in the Rail Industry Association Rail Fellowship Programme.

Welcome to the first issue of **Centrifuge**, our biannual publication providing you with news and information on the range of innovative engineering solutions from L.B. Foster Europe.

Part of NASDAQ-listed, US-based L.B. Foster Company, we deliver for our local and international customers across rail, aerospace, manufacturing, defence, nuclear, automotive, engineering, retail, information and communications technology, and hospitality and events sectors.

With a market-leading reputation for high quality, high performance engineered products and digital communication solutions. Our UK manufacturing centres of excellence deliver standout solutions that are transforming standards of safety, reliability and efficiency for our valued customers.

But don't just take our word for it. Read on and discover how we innovate to solve global infrastructure challenges that keep our world moving.

Explore the full spectrum of L.B. Foster's cutting-edge technologies & solutions and discover our comprehensive products range by visiting our website: **lbfooster.com**

David Clarke
Director of Sales & Marketing
L.B. Foster Europe

OUR FIVE AREAS OF INFLUENCE

We consider the interests and needs of multiple stakeholders, including employees, customers, communities, suppliers, and shareholders. We strive to create value for all stakeholders and prioritise long-term relationships over short-term gains.

- > **We enable safety**
- > **We improve information flow**
- > **We keep things moving**
- > **We monitor conditions**
- > **We enhance environments**

Setting standards in rail signalling panel technology

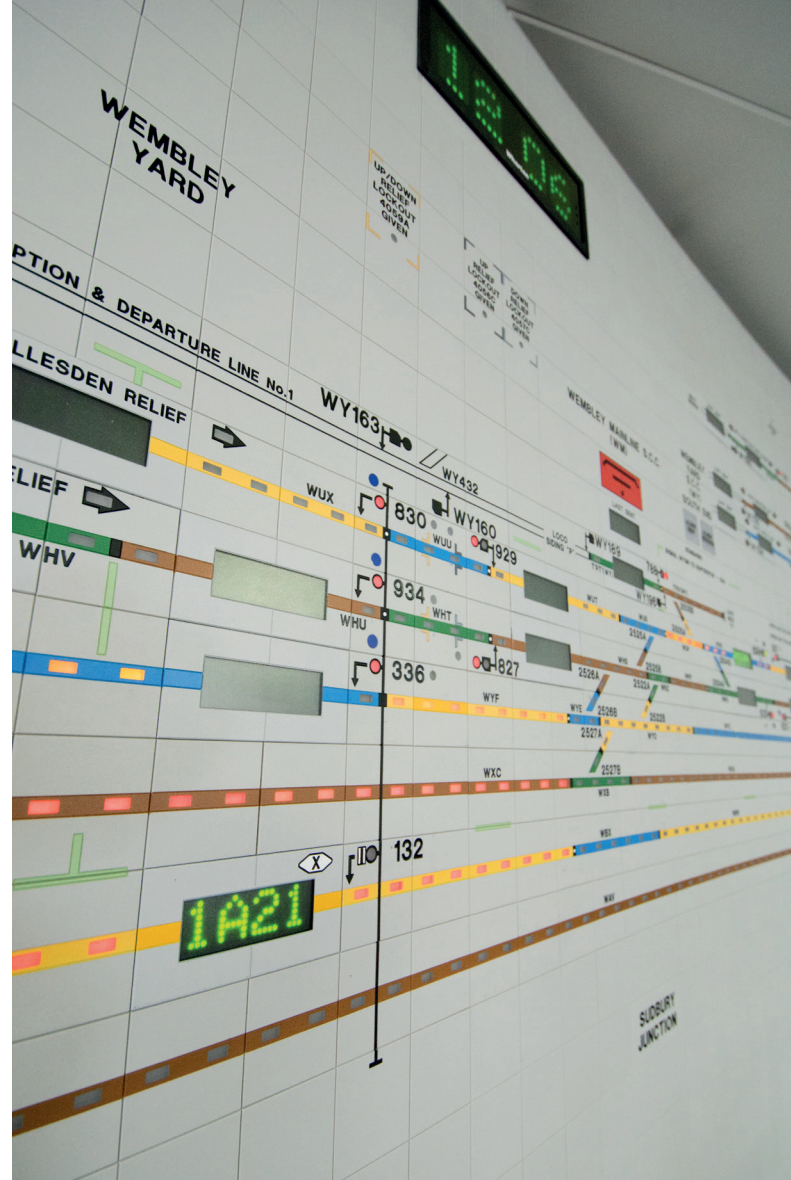
L.B. Foster is the leading manufacturer of rail signalling control panels for Network Rail. We create cutting-edge and reliable solutions, upgrading and maintaining existing signalling panels by replacing outdated components with future-proof solutions.

We work closely with customers from the start of a project, helping to design new panels and make improvements. This collaborative approach ensures rail signalling systems work smoothly and efficiently.

In 2024, we partnered with **Network Rail** to upgrade the control panel at St. Phillips Marsh Depot. The goal was to improve functionality and make it easier for the signaller to use. We replaced an old tiled panel and outdated Swisstac Push/Pull buttons with modern TEW51 Series Push/Pull buttons; we also improved the point buttons for better usability.

Andy Searle Project Engineer at Network Rail, praised our work:

"Working with L.B. Foster and our testers, we've successfully upgraded two signalling panels and are excited for the next one. Their clear communication and quick problem-solving make things much easier. Such efficiency and cooperation are rare in railway projects."



As Control Period 7 begins, we are helping **Network Rail** extend the life of rail signalling panels across the UK. We have created a dedicated team that visits signal boxes to offer expert maintenance advice, suggest spare parts, and identify essential upgrades. This proactive approach ensures that maintenance, replacements, and support are handled smoothly. When needed, we also offer upgrades for old or failing signalling panels to extend lifespan.

New 2025 Parts Catalogue

We are launching a **Signalling Control Panel Parts Catalogue** in April 2025. This will make it easier for customers to find the parts they need. We are also introducing a new surveying service, allowing customers to request inspections directly from us for expert guidance. With our experience, we help improve performance, ensure long-term reliability, and meet industry standards. By focusing on these areas, we support the safe and efficient operation of the UK's rail network.

Register your interest with us by emailing reply@lbfoster.com to receive a copy of our new Signalling Control Panel Parts Catalogue.

Committed to precision engineering

L.B. Foster's Nuclear division continues to demonstrate its expertise in delivering high-quality simulation panels and consoles for mission-critical applications.

Aditya Shah, Business Development Manager,
L.B. Foster Nuclear & Defence explains:

"Recently, we successfully delivered and installed new simulator panels and consoles for **Sizewell B**, replacing the original panels we supplied over 35 years ago. The project was completed on schedule, and the customer has expressed high satisfaction with both the quality and execution."

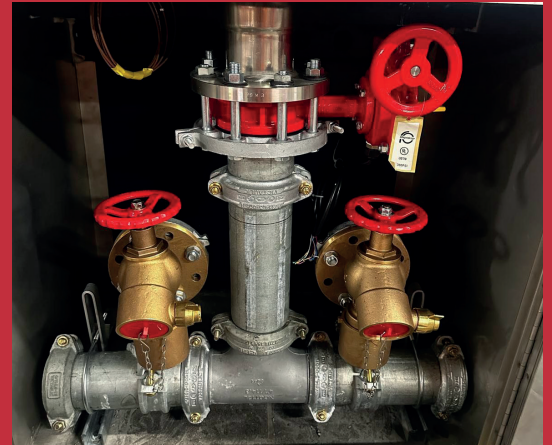
L.B. Foster has manufactured and shipped panels and consoles for a full-scope simulator to Spain. These systems will undergo installation and rigorous testing over the next year, ensuring operators receive comprehensive training before deployment in South America.

Our commitment to precision engineering and reliability continues to strengthen our position as a trusted partner in the nuclear and defence sectors.

For inquiries or collaboration opportunities, please email reply@lbfoster.com and our team of experts will be in touch.



How we're enhancing **fire safety** at one of **London's** busiest railway stations



L.B. Foster is the leading manufacturer of rail signalling control panels for **Network Rail**. We create cutting-edge and reliable solutions, upgrading and maintaining existing signalling panels by replacing outdated components with future-proof solutions.

Almost 23 million people use Clapham Junction station each day, making it the UK's busiest station for interchanges between services. The Edwardian overbridge was built in the early 1900s and serves as the primary passenger route between the station's platforms and two of its main entry and exit points.

Umesh Manoharanehru, L.B. Foster's Fire Preconstruction Manager explains:

"The distinctive overbridge is one of the station's defining features, but due to its age and design it presents several safety issues. Our challenge was to develop an innovative fire suppression solution to protect the structure and the station users in the event of an emergency."

Delivering a Cutting-Edge Fire Suppression System

Following consultation with Network Rail, L.B. Foster was successfully selected as a specialist contractor for the project. A stand-alone pump house was pre-fabricated off-site for efficiency and precision. The project also included the design and installation of a 6,000mm x 3,000mm x 4,000mm water tank with a 58,000-litre capacity, ensuring sufficient water supply for the overbridge hydrants in the event of a fire. Additionally, new power supply systems were designed and installed to energise critical assets within the pump house.

Umesh Manoharanehru concludes:

"The project at Clapham Junction clearly demonstrates our ability to tackle complex design and logistical challenges. As a team, we are dedicated to overseeing significant fire safety projects that contribute to safer rail infrastructure."

Trusted partner in delivering fire protection services to Transport for London.

Since 2020, we have been a trusted partner in delivering fire protection services to Transport for London, playing a critical role in enhancing safety across the UK's rail network. Our expertise in Fire Detection and Fire Suppression means we continue to lead innovative projects within our Fire Division - from design through to commissioning and project handover.

For inquiries or collaboration opportunities, please email reply@lbfoster.com and our team of experts will be in touch.



How we're connecting London

We are transforming London's connectivity landscape, offering engineers and technologists a blueprint for integrating advanced telecommunications infrastructure within a major urban environment.

L.B. Foster is fulfilling a crucial role in Transport for London's (TfL) £2.2 billion Telecommunications Commercialisation Project (TCP), working as a delivery partner for station builds. Beginning work in October 2023, L.B. Foster partnered with principal contractor Installation Technology to implement telecoms infrastructure across all London Underground stations.

A primary focus of the TCP is to provide uninterrupted mobile connectivity throughout the London Underground.

This involves equipping 137 stations and 400 kilometers of tunnels with advanced communication systems. Commuters' devices will connect to radio frequency (RF) antennas installed on platforms, which transmit signals via structured cabling to centralised cabinets. These signals are then converted to optical light and routed to data centres, ensuring seamless mobile service across the network.

The scope of our contract is far-reaching and includes:

- > **Installation of all LAN cabling throughout stations for CAT6a and fibre cabling.**
- > **Installation of associated Cable Management Systems, including primary, secondary, and final conduit containment.**
- > **Installation of all field Low Power Radio Nodes with associated antennas.**
- > **Installation of all Secondary Backbone Distribution Cabinet and Zone Distribution Cabinet throughout the sites.**
- > **Testing and handover of all works.**

The project includes constructing a fibre optic network to support underground mobile coverage and extend high-speed connectivity to buildings and street assets, such as traffic lights and lampposts.

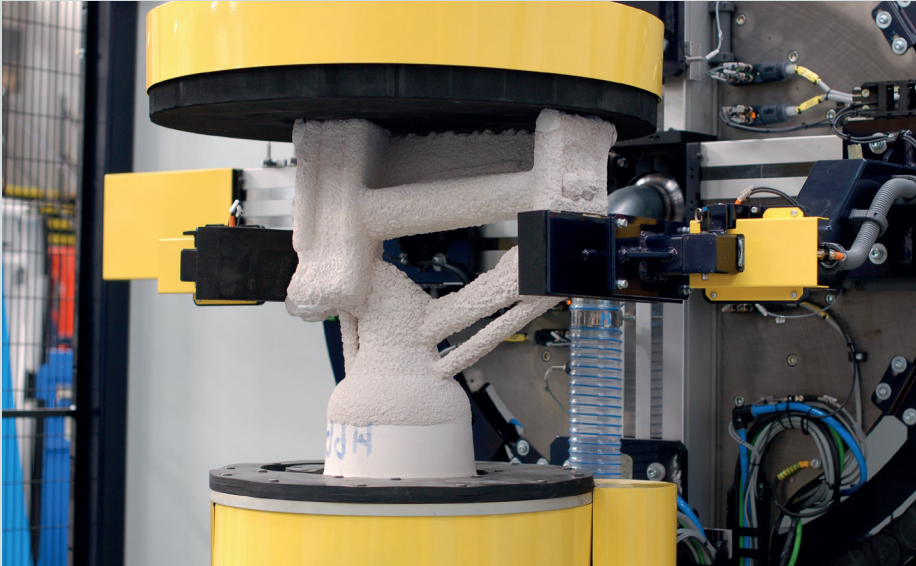
This infrastructure is essential for the deployment of 5G technology and the Internet of Things, facilitating advancements in urban management and public services.

The TCP also aims to provide public Wi-Fi services in specified TfL stations. This expansion will offer passengers improved internet access within stations and tunnels, allowing them to stay connected throughout their journeys.

For more information about our Telecom & Fire services, solutions, and how we can support your project delivery, please email reply@lbfooster.com and our team of experts will be in touch.

Building on remarkable project success in Brixton, L.B. Foster is now delivering works across numerous stations throughout London including:

- | | |
|--------------------------|------------------------|
| <i>Kings Cross</i> | <i>Swiss Cottage</i> |
| <i>Tooting Bec</i> | <i>Warwick Avenue</i> |
| <i>South Wimbledon</i> | <i>Fulham Broadway</i> |
| <i>Kennington</i> | <i>Stepney Green</i> |
| <i>Holloway Road</i> | <i>Highgate</i> |
| <i>Knightsbridge</i> | <i>Warren Street</i> |
| <i>Piccadilly Circus</i> | <i>High Street</i> |
| <i>Leicester Square</i> | <i>Kensington</i> |
| <i>St John's Wood</i> | <i>Kentish Town</i> |
| <i>Nine Elms</i> | <i>Euston Square</i> |



How our smart solutions apply advanced robotics and automation

Our Robotics & Automation team is setting new standards in engineering excellence and innovation. Our focus on precision, reliability, and integrated design is driving significant advances in how industries approach automation.

Pioneering Precision in Vacuum Casting

One of our standout achievements in 2024 was the relaunch of the L.B. Foster Automated Mould Cleaner. Engineered for the vacuum casting industry, this solution represents a leap forward in process reliability. Our innovative design reduces scrap rates and enhances product quality by integrating camera-driven vacuum inspection, pneumatic cleaning wands, and customisable clamping solutions. This multi-faceted approach optimises the manufacturing process by providing a robust solution to the stringent demands of precision engineering.

Enhancing Ergonomics and Safety in Assembly

In parallel with product innovations, we are also addressing the critical challenges of ergonomics in precision assembly environments. Our new suite of manual handling assist solutions is engineered to support operators facing complex, high-precision tasks. Our smart systems deliver measurable improvements in both operator safety and efficiency by merging automation with intelligent feedback mechanisms. This demonstrates our commitment to creating a balance between advanced manufacturing processes and workforce well-being.

Jack Whitehouse is L.B. Foster's Sector Lead, Robotics & Automation. He says:

"Looking ahead, our journey is far from over. In 2025, we will continue to push the boundaries of what's possible by delivering bespoke automation solutions that integrate mechanical, electrical, and software engineering under one roof. Our solutions are designed to empower our customers to confidently navigate the rapidly evolving landscape of modern manufacturing through advanced robotic integration, automated assembly, or cutting-edge inspection systems."

We invite you to visit our Manufacturing Centre of Excellence in Nottingham to see innovation firsthand.

To see mould cleaners and other innovation within our advanced Robotics & Automation division, please email reply@lbfooster.com and our team of experts will be in touch.

How our automated handling solutions deliver success

LB Foster's Automated Handling Solutions completed a significant installation for a major manufacturer of earth moving equipment in 2024. An 18-month project saw the successful completion of a 16-station heavy duty tow-line conveyor for an assembly line for a new 16-ton vehicle. This is a very impressive system and is testament to the outstanding capabilities of our team to deliver such substantial and important engineering projects.

Our range of standard and bespoke conveyor systems continues to adapt and evolve to the needs of our customers needs. Our recent systems have been installed in a variety of challenging environments including clean rooms, harsh dusty environments and ATEX zones. All our conveyors offer safety and efficiency improvements at their core.

Our latest robot debander innovation has now been successfully implemented in the field with 3 units now fully operational in Australia for a well-known beverage manufacturer. The robot debander is a great addition to our range offering additional flexibility for strap removal & opening opportunities in other industries outside of food and drink, such as automotive.

For inquiries or collaboration opportunities, please email reply@lbfooster.com and our team of experts will be in touch.



Global brands shine brighter with Skratch

Skratch is a recognised innovator in the creation of bespoke audio-visual solutions across sectors such as transport, retail, automotive, hospitality, and events.

With over 20 years of expertise, Skratch has established itself as a dominant force in the digital signage industry, renowned for its cutting-edge technology and unwavering dedication to excellence. The brand is synonymous with innovative breakthroughs and creative brilliance.

Skratch collaborates with industry leaders, including Microsoft, Google, Asics, Asda, Tesco Mobile, Costa, Chanel, JCDecaux, and Bentley, to transform bold concepts into vibrant marketing campaigns. The company's state-of-the-art technology enhances brand engagement, captivating audiences globally.

Our extensive range of solutions spans dynamic lighting, digital displays, scent marketing, and a comprehensive suite of immersive brand experience technologies. These offerings are tailored to boost revenue and captivate customers, with digital displays and signage leveraging the latest advancements to deliver vivid, eye-catching visuals.

The UK's digital signage market is witnessing rapid growth, driven by the rising demand for in-store retail media networks and the shift from traditional print to digital displays. Skratch is well-positioned to lead this transformation, spearheading innovative technologies and visionary solutions.

"Our synergy with L.B. Foster amplifies our technological capabilities across the power and transport sectors, allowing us to provide even more comprehensive solutions to their clients. Together, we are driving innovation in established industries while pioneering new digital solutions tailored to L.B. Foster's markets. With an unwavering commitment to progress, we're ready to shape the future of digital solutions in the UK and beyond."

Ian Beeley, Skratch

Skratch continues to redefine the boundaries of digital signage technology, it remains an industry powerhouse, empowering global brands to achieve unparalleled visibility and impact.



Want to see innovation in action?
Schedule a visit to our Telford
showroom by emailing us at
hello@skratchav.com

In April 2024, L.B. Foster began working with **Rail Delivery Group** (RDG), in conjunction with participating train operators, to deliver a **Welcome Points trial** to help improve customer service and accessibility across the rail network.

Welcome Points trial seeks to improve customer services across rail

Welcome Points have since been designed in partnership with accessibility groups, passenger bodies, and train operators. Three different models of Welcome Point are part of the trial, which will run until Spring 2025.

The units feature specific accessibility requirements that aim to meet the needs of wheelchair users, including the latest British Sign Language (BSL) translation to better support deaf passengers, and provide new ways with new assistive technology for visually impaired passengers to locate the Welcome Points and call for assistance.

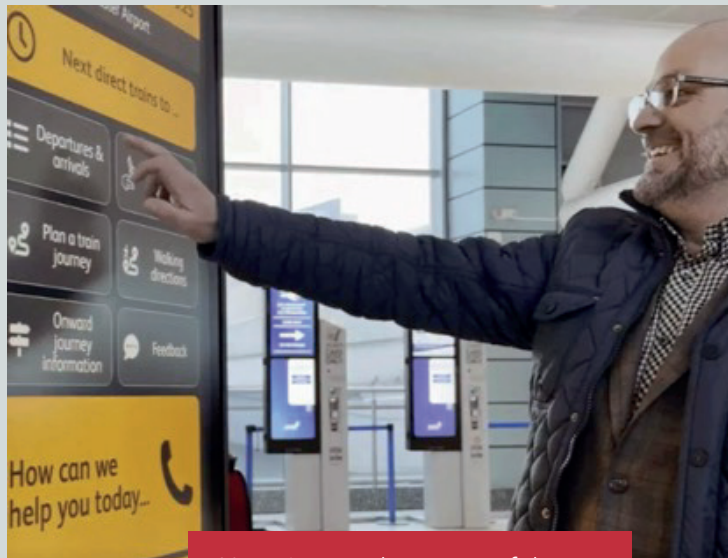
The easily recognisable yellow on black Welcome Point design will provide a recognisable focal point in stations so that customers will know they can find a place to go for assistance and information when they arrive at a station, including those who have a range of disabilities and dual sensory loss.

Jacqueline Starr, Chair and CEO, Rail Delivery Group, commented:

“Feedback from passenger bodies and accessibility groups has strongly indicated that there is a need to improve the customer experience on arrival at many stations. “Previous customer feedback has highlighted the inconsistency and difficulty of understanding and accessing station services which creates a barrier to using the railway. We have listened to feedback and agree that Welcome Points could greatly enhance the customer experience at stations.”

As part of the trial, Welcome Points have been installed at circa 35 stations. RDG will report on the findings and will make recommendations later in 2025.

Customers are encouraged to visit participating stations and use the Welcome Points if they need staff assistance or information to support them with their journey from that station.



Next time you're at one of the participating stations, don't hesitate to check out a Welcome Point if you need assistance or information.

You'll find them at locations across the UK including:

Huddersfield	Farrington
Manchester	Willesden Junction
Airport	Hastings
Scarborough	Tonbridge
Harrogate	Gatwick Airport
St Erth	Blackpool
Stroud	Deansgate
Sunderland	Norwich.

Join us at the RIA Innovation Conference at ICC Wales and Rail Live at Porterbrook's Long Marston Rail Innovation Centre, where you'll find our Welcome Points.

To arrange a demonstration or request more information about our Inform products range, email us at reply@lbfoster.com

Introducing our MC-5 Gauge Face Bar and KELTRACK® Transit EX

L.B. Foster has developed two high-performance friction management solutions for the global rail sector.

We are the **global leader** in Friction Management

MC-5 Gauge Face Bar

This product is a major upgrade in our range of friction management solutions. The MC-5 Gauge Face Bar uses an innovative design that provides a number of improvements to the MC-4 bar and other gauge face bars on the market.

Key features

Improved Flow Distribution

The MC-5 Gauge Face Bar design guarantees grease flows evenly to every outlet, reducing clogging and ensuring that grease is applied correctly on the rail surface.

Lighter Weight

The MC-5 is about 40% lighter than previous models, saving roughly 6.5 lbs (3 kgs) per unit.

Corrosion Resistance

Aluminium parts help prevent corrosion, keeping the bar performing at its best.

Leak Prevention

The resilient gasket design greatly reduces the chance of leaks.

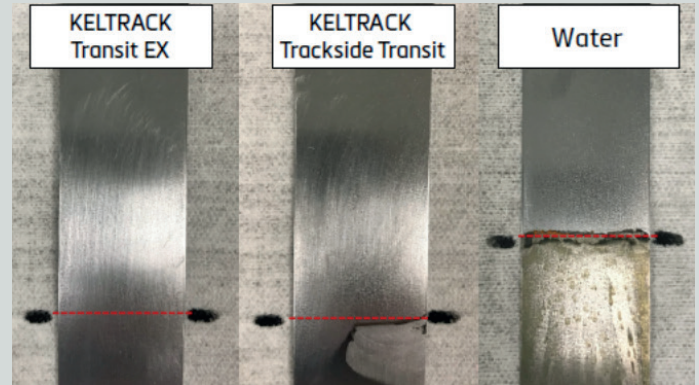
Easy Installation

The MC-5 is designed as a direct replacement for the older MC-4 model, making installation simple and straightforward.



KELTRACK® Transit EX

Our new top-of-rail friction modifier, KELTRACK® Transit EX is currently being tested in the UK and around the world, and many customers are switching to it.



Key features

Longer Lasting

KELTRACK® Transit EX stays effective longer than our previous product, meaning less frequent applications.

High-Quality Ingredients

Advanced formulation ensures it stays on longer, works in very cold weather, and offers better protection against corrosion.

Tested Performance

Laboratory tests show KELTRACK® Transit EX holds its effectiveness twice as long as our earlier version, resulting in extended performance or reduced application needs.

Additional Benefits

Balanced Friction

It maintains the right friction level to help reduce track wear and lower squealing noises.

All-Weather Use

Performs well in every season, even at temperatures as low as -17°F (-27°C).

Dry Film Formation

At room temperature, KELTRACK® Transit EX forms a dry layer that resists being washed away by water.

Reliable Performance

Stable formulation ensures long-lasting and dependable results.

To learn more about Friction Management products range email reply@lbfoster.com and our team of experts will be in touch.

Rockfall and debris on railway lines pose significant risks to safety and network operations, making reliable detection essential. L.B. Foster is redefining rockfall monitoring with its innovative solution, deploying advanced LiDAR technology to ensure more accurate hazard detection, enhancing safety, and minimising disruption to train operations.

How our innovations are making railways safer

Rockfall Monitoring from L.B. Foster is a network of 2D LiDAR scanners that continuously monitor tracks for obstructions. Highly sensitive scanners detect and verify potential hazards in real time, significantly reducing false alarms caused by environmental factors like rain, fog, or wildlife.

Unlike traditional monitoring technologies that require manual resets and frequent maintenance interventions, our Rockfall Monitoring solution automatically resets once a hazard is cleared, ensuring uninterrupted protection.

The system's centralised data processing, intuitive web portal, and automated alert functionality provide real-time insights and allow for seamless integration with local signalling systems. This enables rail operators to respond swiftly to potential threats while maintaining optimal network efficiency.



Real-world trials with leading railway companies have demonstrated the reliability of L.B. Foster's Rockfall Monitoring. The system successfully detected every rockfall event during testing. It also significantly enhances operational efficiency while lowering costs by reducing maintenance callouts by over 90% and cutting slow order time by 98.5%.

Setting a New Standard for Rail Safety

L.B. Foster's Rockfall Monitoring system represents the future of railway safety with its cutting-edge LiDAR-based detection capabilities. We continue to lead the way in delivering smarter, safer, and more efficient railway solutions, providing rail networks with the tools needed to mitigate rockfall hazards effectively.

For inquiries or collaboration opportunities, please email reply@lbfoster.com and our team of experts will be in touch.

L.B. Foster serves the transport, manufacturing, defence, nuclear, retail, automotive, engineering, hospitality, ICT, and events sectors.



Nottingham (Crocus Street)

- > Dynamic Information Displays
- > Passenger Information Displays
- > Steel Fabrication
- > Wiring & Cabling
- > Manufacturing
- > Warehousing
- > Support & Maintenance
- > Sales & Aftersales

Telford

- > Digital Display Systems
- > Brand Experience Solutions
- > Sense Marketing Solutions
- > Showroom
- > Warehousing
- > Support & Maintenance
- > Sales & Aftersales

Sheffield

- > Friction Management Products, Services & Support
- > Remote Rail Friction Management Monitoring Systems
- > Allegheny Rail Products
- > Product Design & Development
- > Manufacturing
- > Laboratory
- > Warehousing
- > Sales & Aftersales

Nottingham (The Midway)

- > Control & Command Solutions
- > Manufacturing
- > Wiring & Cabling
- > Mimic Display & Testing
- > Rockfall & Floor Monitoring Systems
- > Wheel Impact Monitoring
- > Automation & Materials Handling
- > Robotics & Automation
- > Conveyors
- > Debanders
- > Manufacturing
- > Warehousing
- > Support & Maintenance
- > New & Legacy Equipment Servicing Parts
- > Sales & Aftersales

London

- > BMS & SCADA
- > Heating, Ventilation, and Air Conditioning (HVAC)
- > Design, Supply, Installation & Commissioning of a diverse range of Electrical Systems
- > Decarbonisation Services
- > Fire Detection & Suppression Solutions
- > Fixed & Operational Telecoms Services: FTN, FTNx, REB & DOO
- > Radio & Transmission Systems
- > CCTV & Security Systems
- > Support & Maintenance
- > Manufacturing
- > Warehousing
- > Sales & Aftersales

Experience innovation first-hand with L.B. Foster across the UK and Europe

L.B. Foster invites you to visit our Manufacturing Centre of Excellence in Nottingham and the Skcratch showroom in Telford. Meet our team of experts for an exclusive experience showcasing the innovations happening here in the UK.

Whether you're attending one of the upcoming industry events or planning a private tour, this is your opportunity to witness first-hand how L.B. Foster is keeping our world moving and shaping the future of manufacturing and technology. You can also meet us at the following events.



14 MAY

Birchwood
Nuclear Hub



18-19 JUNE

Porterbrook's
Long Marston
Rail Innovation
Centre

TRAKO

23-26 SEPTEMBER

Gdańsk,
AMBEREXPO

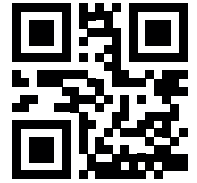
Don't miss out on this exceptional chance to engage with leading expertise and pioneering technologies. To arrange a meeting, schedule a visit, or learn more about our exciting developments, please email us at reply@lbfoster.com and for Skcratch hello@skratchav.com

We look forward to welcoming you!

David Clarke

Director of Sales & Marketing

L.B. Foster Europe



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