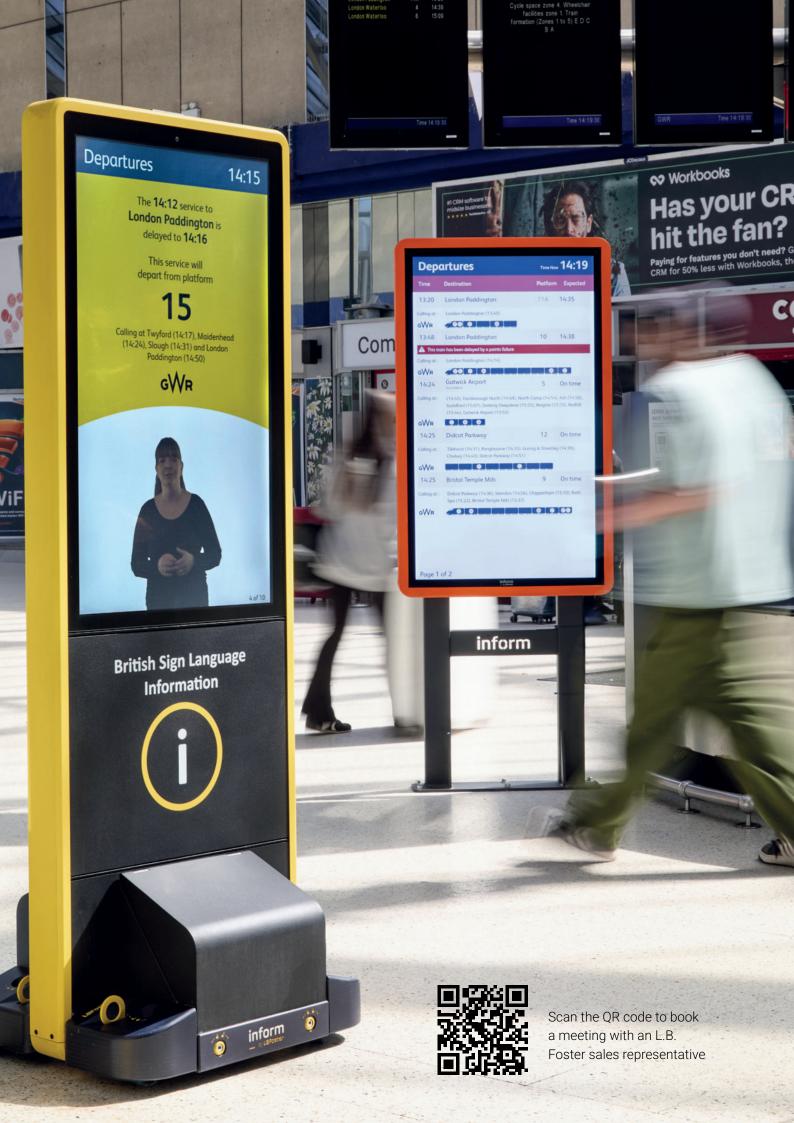


#### **Business News**

Autumn 2025

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



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### WELCOME

This issue of **Centrifuge** reflects on a year of bold progress and transformative innovation. Our journey as a trusted partner to the rail and nuclear sectors across Europe - and increasingly beyond - has reached an exciting new chapter.

At the heart of this momentum is the launch of our new 40,000 sq ft Manufacturing Centre of Excellence (MCoE) in Nottingham. This state-of-the-art facility marks a significant investment in UK industry and strengthens our capacity to deliver scalable, high-performance infrastructure solutions. It's a powerful testament to our commitment to quality, reliability, and future-ready engineering.

We continue to push boundaries, from aligning with the strategic vision of the GBRX to pioneering smart passenger technologies. Whether it's our award-winning Inform Digital Help Point, the evolution of Skratch® into a digital experience powerhouse, or the development of sustainable colour e-Paper displays, our focus remains clear: innovation that enhances performance and enriches passenger experience.

We're also expanding our capabilities in signalling with the launch of our **Signalling Control Parts** catalogue and complementary survey service - another step in supporting safer, smarter rail operations.

Thank you to everyone who joined us at Rail Live 2025. Your insights and enthusiasm fuel our drive to innovate. We're now gearing up for TRAKO in Poland and Saudi Rail, where we'll showcase how our solutions empower networks to operate more safely, efficiently, and sustainably.

We hope you enjoy this edition of **Centrifuge**. Thank you for your continued support; we look forward to connecting with you in the months ahead.

#### **David Clarke**

Director of Sales & Marketing L.B. Foster Europe





## Driving Innovation in Global Transport and Nuclear Infrastructure from the UK's New Manufacturing Powerhouse

As the global transport and nuclear sectors evolve to meet critical sustainability goals of the 21st century, next-generation innovation, technical agility, and engineering excellence are no longer optional—they are essential. L.B. Foster's investment in its state-of-the-art Manufacturing Centre of Excellence (MCoE) in Nottingham positions the UK as a hub for high-spec industrial advancement.

Purpose-built to support complex prototyping, bespoke assemblies, and scalable high-volume production, this 40,000 sq ft smart facility is designed to tackle technical challenges across global infrastructure-from urban mobility systems to heavy-haul, freight, and high-speed rail networks. By harnessing advanced fabrication techniques, precision engineering, and integrated digital workflows, the MCoE delivers resilient, future-ready solutions to some of the world's most demanding transport and nuclear projects.

#### Driving Innovation Across the Fabrication Lifecycle

Neil Sheffield, Managing Director of L.B. Foster Europe, explains: "The expansion of our Manufacturing Centre of Excellence demonstrates our commitment to growing our capability and capacity. This is far more than a manufacturing site-it's a fully integrated, technologyled ecosystem where mechanical, electrical, and manufacturing engineering expertise converge to suppo end-to-end industry applications.

Our vertically integrated capability-consolidated under one roof-positions us as a single-source partner, streamlining supply chains and executing at scale."

L.B. Foster's expert design teams utilise globally recognised software platforms, including CREO, SOLIDWORKS, AutoCAD, and EngraveLab 11, tightly integrated with CAM systems. Simulation tools such as ANSYS validate design integrity prior to production, reducing risk and ensuring compliance with the most rigorous international standards.

#### Certified Excellence for Critical Rail Components

Rail infrastructure demands uncompromising performance. L.B. Foster's fabrication processes are underpinned by internationally recognised certifications and standards. All welding and metalwork are carried out by technicians qualified to BS EN ISO 9606-1:2017, ensuring that every component—from control panels to structural assemblies—meets the highest expectations of durability, safety, and compliance.

We support a broad range of welding techniques (MIG, TIG, and MMA/Stick), enabling adaptability to national and international specifications and technical requirements, whether for urban signalling infrastructure, heavy-duty rolling stock support systems, or nuclear control rooms.

**Advanced Fabrication Powered by Technology** 

At the heart of the MCoE is a 4kW Fibre Laser Cutting System powered by Smart Cube technology—delivering rapid, precision cutting for ferrous and non-ferrous materials with minimal thermal distortion. With a working envelope of 3000mm x 1500mm, it offers:

> Mild steel: up to 20mm

> Stainless steel: up to 12mm

> Aluminium: up to 8mm

Combined with 4-axis Synchro Technology for highspeed, high-tolerance cutting and complex multi-bend capabilities, L.B. Foster's new facilities meet the precision demands of modern engineering, including custom enclosures, brackets, frames, and complete panel builds.

#### Streamlined Workflow for Global Project Efficiency

A fully digitised, CAD-to-CAM integrated workflow reduces errors, eliminates inefficiencies, and shortens lead times. Every stage is validated and optimised for repeatable, cost-effective output—from design to final assembly. This is ideal for customers managing large-scale projects with tight deadlines and international coordination requirements.

In addition to fabrication, we offer in-house:

- > Harness and panel wiring
- > Mechanical and electrical builds
- > Assemblies and box builds
- > Engraving, inking, and painting

Neil Sheffield adds: "This expansion underscores our commitment to innovation, strengthens operational agility, and empowers us to provide resilient, future-ready solutions for some of the world's most complex and demanding transport and nuclear projects."

#### Safety, Security & Scalability

The MCoE is access-controlled, with 24/7/365 surveillance and industry-standard health and safety

protocols, ensuring sensitive components are produced and handled with complete confidence.

Scalable operations enable L.B. Foster to meet the unique challenges of both national and global clients—whether delivering a one-off prototype for a rapid-transit upgrade or supporting full production for a continental initiative.

#### Serving the Global Rail Industry

The L.B. Foster Manufacturing Centre of Excellence supports advanced infrastructure projects across the rail sector worldwide—from metro systems and high-speed rail to freight logistics, signalling control, and critical energy applications. As global investment accelerates in resilient, future-ready systems, we stand ready to empower governments, contractors, and OEMs with high-performance, cost-effective, and technically sophisticated fabrication solutions.

Our engineering capabilities deliver unmatched precision and scalability

#### 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. 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.





#### **INFORM**

L.B. Foster is leading a revolution in digital innovation in rail, with recent recognition and initiatives underscoring our ongoing commitment to passenger experience, accessibility, and sector collaboration.

Dagan Bradbury is Head of Inform at L.B. Foster Europe. He says: "We're not just leading the way in digital innovation - what we're doing here at L.B. Foster with Inform is setting industry standards.



That's why our Innovative Digital Help Point has just received a Regional Innovation Award from the European Railway Clusters Initiative (ERCI).

"Our Digital Help Point is a cutting-edge solution that redefines the traditional help point, integrating real-time audio-visual support, improved accessibility features, and smart diagnostics to provide a safer, more inclusive passenger experience. The award recognises our leadership in developing technologies that drive meaningful change across European rail networks."

#### Award recognition

Our groundbreaking Welcome Point was shortlisted for the Accessibility Achievement of the Year at the prestigious National Rail Awards and was also a finalist for the Equality, Diversity & Inclusion (EDI) Award at the RISE Awards, highlighting our

successful collaboration with the Rail Delivery Group. In addition, the Transport for Wales L.B. Foster Digital Totem—featuring both English and Welsh languages has been shortlisted for Product of the Year at the Spotlight Cymru Rail Awards 2025. This recognition celebrates its innovative contribution to enhancing passenger experience and promoting inclusivity across the rail network

#### Sponsoring RIA **Trailblazers**

"As part of our commitment to shaping the future of rail, we sponsored the RIA Trailblazers Summer



Networking Reception 2025 in June at the KIA Oval in London. Supporting this flagship event demonstrated our dedication to collaboration, innovation, and nurturing the next generation of rail industry leaders," explains Dave Clarke, Director of Sales & Marketing at L.B. Foster Europe.

"These achievements and initiatives reflect our continuing commitment to creating connected, accessible environments through intelligent technology.



L.B. Foster continues to lead the way in delivering digital transformation across the rail sector - from award-winning help points to dynamic wayfinding and inclusive passenger solutions."

#### CASE STUDY - READING STATION



Reading Station in Berkshire - one of the UK's busiest rail hubs - has deployed 16 Inform digital displays transforming how travellers access real-time information.

- Inform Mobile Totems
- Inform Wall Mount TOUCH Screens
- Inform 43" Digital Posterboards
- Inform 55" Digital Posterboards



- Each display is powered by Inform Media software, presenting complex rail data in a clear and user-friendly interface. The screens provide wayfinding and travel confidence
- > Live train information, updated in real time
- British Sign Language (BSL) Departures,
- > improving accessibility
- > Live disruption mapping, showing service
- > impact zones



- Rainbow Boards, providing simplified visual service status
- New digital poster boards deliver real-time, content in a format that is easier to manage, update and localise. These installations offer operators new opportunities to communicate effectively with passengers while reducing the operational burden of traditional poster updates.

## L.B. Foster's Inform: Shaping the Future of Smart and Inclusive Passenger Information Displays





Want to learn more about Inform Digital Poster Displays? Get in touch with L.B. Foster Inform team by emailing uksales@lbfoster.com or scan the QR code to view our Inform Products range.



As nuclear sector advances to meet the dual imperatives of clean energy generation and heightened operational resilience, the control room is evolving into a digital nerve center.

At L.B. Foster, we are engineering that transformation.

In the last six months, we successfully manufactured and demonstrated our first fully digital control room for a leading nuclear OEM.

Built around high-resolution digital displays and integrated system architectures, this platform consolidates SCADA, process controls, network telemetry, and live video feeds into a unified operator interface. The result is enhanced situational awareness, superior ergonomics, and faster decision cycles; all capabilities that will underpin 20 new-build reactors across Europe and the U.S.

Recognising that modernisation is not a binary shift, we also deliver hybrid solutions that embed digital displays into traditional mosaics. This approach preserves the deterministic reliability of hardwired systems while introducing advanced visualisation and data integration. For operators, it is a risk-managed path to modernization that accounts for cybersecurity, software validation, and regulatory requirements.

# L.B. Foster delivers digital innovation to the nuclear sector

Beyond new-build projects, our engineering teams are extending the operational life of existing reactors by replacing thousands of obsolete instruments with modern equivalents. This ensures critical assets remain safe, reliable, and aligned with the growing demand for continuous, clean baseload energy.

As Aditya Shah, Business Development Manager at L.B. Foster Europe, explains: "The nuclear sector cannot afford to compromise on safety or reliability Our digital control room technologies are designed to integrate seamlessly with legacy infrastructure, giving operators the confidence to modernize without disruption. It's about blending innovation with proven engineering discipline."





## NEW RSM Parts Catalogue: Precision Support for Every Panel

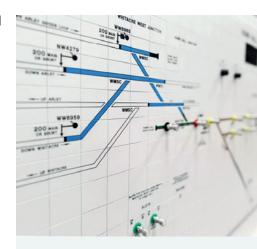
This significant addition reinforces our ongoing commitment to helping Network Rail Asset owners, maintainers, and operators reduce costs, minimise downtime, and extend the life of signalling control panel assets. Developed with input from industry specialists and customers alike, the RSM Parts Catalogue offers detailed, bespoke parts lists tailored too specific boxes, including legacy and third-party equipment.

Our engineering team has the capability to survey, service and manufacture compatible parts, ensuring continuity and compliance without compromise regardless of whether your signalling control panel is an L.B. Foster original or manufactured by another supplier.

"What sets our new RSM Parts Catalogue apart is its ability to provide intelligent, structured support across the entire spectrum of UK signalling control panels," says Nigel Dobney, RSM Sector Lead at L.B. Foster Europe. "Whether we built the panel or not, our aim is simple: ensure the right parts are available at the right time, helping maintainers keep the UK train network running safely and efficiently."

This capability is backed by complimentary site surveys for signalling panels, giving asset owners critical insights into current performance, wear and future upgrade needs. These surveys form the basis of tailored, box-specific parts lists that streamline procurement and reduce the risk of obsolescence.

Explore the full RSM Parts Catalogue by visiting lbfoster.com. For enquiries or to schedule a free panel survey, please contact our Rail Signalling Control Solutions team by emailing scrailparts@lbfoster.com



As part of L.B. Foster's continued thought leadership in the sector, sector lead Nigel Dobney is featured in Rail Business Daily sharing deeper insights into how modern data-driven support and targeted maintenance can transform panel reliability and operational performance.

## Bold New Identity Cements Leadership in Digital Display



Skratch® has officially entered a new era with the launch of our new website skratchtech.com and a refreshed corporate brand identity.

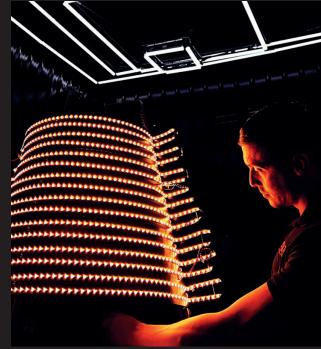
Skratch's global footprint is a testament to its technical prowess and operational scale. This rebranding effort is designed to align Skratch's visual identity with its forward-thinking ethos and to better communicate its value proposition to a global audience.

Skratch® has been at the forefront of experiential marketing for over two decades, delivering unforgettable campaigns for more than 30 of the world's most iconic global brands. We consistently push the boundaries of what's possible in digital engagement, from immersive retail experiences to dynamic event activations.

Known for engineering moments that arrest attention and spark movement, Skratch's work often leaves a lasting impression - whether through a smile, a share, or a subtle pause - without the audience even realising who was behind it. That's the Skratch® effect.

Operating across diverse environments including train stations, airports, gyms, supermarkets, car showrooms, and retail spaces, Skratch® transforms everyday locations into high-impact arenas for brand expression. Their approach turns passive footfall into active engagement, elevating brands above the noise.

With a rich history of creative and technical achievements, Skratch® has earned a reputation for reliability, creativity, and cutting-edge execution.











In the health and fitness sector, Skratch® recently completed an immersive digital fit-out for Everlast Gyms. The project saw the integration of large-format digital displays and dynamic kinetic lighting technology to create high-impact training environments. The solution demonstrates how integrated technologies deliver engaging experiences beyond traditional signage, from ambient lighting control to branded content displays.

## 50,000 +

## Digital displays deployed worldwide

Our Work:

#### **Transport**

A live cinema installation at a train station for the Oppenheimer premiere.

#### **Bus shelters**

A high-velocity brand blitz for Sky across London's bus

The viral "tweet-to-eat" Walkers dispenser featuring Gary Lineker, which ignited widespread social media traction.

#### Cinema

Immersive digital zones deployed throughout Cineworld

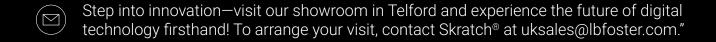
A cinematic experience for the No Time To Die premiere.

Kinetic lighting designs for luxury supercar showrooms—now replicated globally.

Skratch® also pioneered scent marketing for the Terry's x Costa launch, transforming routine coffee runs into sensory brand encounters. In fashion retail, Skratch wrapped storefronts in digital architecture and introduced robotic hosts, turning pavements into interactive exhibitions.



Skratch's signature is unmistakable: bold, immersive, and strategically disruptive. If a brand moment made someone look twice, it was likely Skratch® behind it.









## **NEW** Nature Approved ePaper Displays

As Great British Railways (GBRX) sets its sights on delivering smarter, more connected infrastructure for passengers, Skratch® is positioned perfectly to enhance passenger experiences at stations.

Built around cutting-edge E Ink technology, these ultra-low-power digital displays offer high visibility in all lighting conditions, exceptional durability, and minimal energy consumption. Teams from Skratch® and L.B. Foster are working together to provide endto-end solutions that meet the demands of modern rail infrastructure - from real-time timetable updates to wayfinding signage.

While L.B. Foster leads on in-house product development, including hardware design, prototyping, and R&D, Skratch® is responsible for system integration, software compatibility, and networked deployment. This partnership ensures displays can be managed centrally across large estates. This includes CMS integration, content scheduling, remote updates, and performance analytics.

Gavin Wright, Director of Operations, Skratch® explains: "Our modular e-paper solution helps train operators deliver consistent, high-quality passenger information with a significantly lower carbon footprint compared to traditional displays ideal for both major transport hubs and rural stations."

Gavin continues: "As demand for our inspirational solutions continues to grow, we're placing strong emphasis on showroom visits at our Telford headquarters, where customers can experience our full solution range in person. Our hands-on showroom demonstrates what's possible when technology and creativity align."

These sessions offer stakeholders - from rail operators and retailers to gym owners and public sector organisations - an invaluable opportunity to experience the wide range of capabilities in action, explore customisation options, and consult directly with our team of integration specialists.

Partnering for a smarter, more sustainable future Gavin concludes: "Our collaborations with our colleagues at L.B. Foster, third party manufacturers, and CMS partners ensure we offer a truly scalable, future-proof platform that is tailored to meet the evolving demands of modern infrastructure."

To schedule your visit or learn more about our solutions, get in touch with the Skratch® team today.

### World's largest precious metals mine finds treasure in traction technology

L.B. Foster's TGA3 Traction Gel Applicator system, paired with the ALLEVIATE® traction enhancement gel, successfully addressed traction challenges for one of the world's largest underground mining complexes.

In underground mining operations, reliable traction at the wheel/rail interface is critical to maintaining safety, efficiency, and productivity. Loss of adhesion can result in wheel slip and slide incidents, leading to operational delays, reduced load capacity, and increased safety risks.

The mining complex operates a fully automated locomotive fleet across a 23-kilometre (14-mile) underground rail network. Our customer reported frequent low-adhesion issues in key loading and unloading zones, causing wheel slip and slide events. Each incident required a full reset of the locomotive system, resulting in significant downtime and operational inefficiencies. As a temporary mitigation strategy, the mine reduced car loadings well below design capacity, sacrificing throughput to maintain control.



#### Solution deployment

L.B. Foster proposed a two-part solution:

- TGA3 Traction Gel Applicator: A compact, trackside system designed to dispense tractionenhancing gel precisely at the wheel/rail interface.
- ALLEVIATE® Gel: A water-based, high-viscosity gel engineered to improve adhesion without interfering with signalling systems.

An initial trial involved manual application of ALLEVIATE® using rollers and brushes. The results were immediate: friction levels improved, wheel slip incidents declined, and locomotive uptime increased. Based on this success, the mine installed multiple TGA3 units to automate gel application across critical zones.

#### Results and impact

Following full deployment, the mine reported:

- > Elimination of low-adhesion incidents in targeted
- Restoration of car loadings to full design specification — an increase of up to 46%.
- > Improved operational reliability, with fewer delays and reduced reset procedures.
- Enhanced safety, with lower risk of signal overruns and track circuit failures.



#### **Key Features**

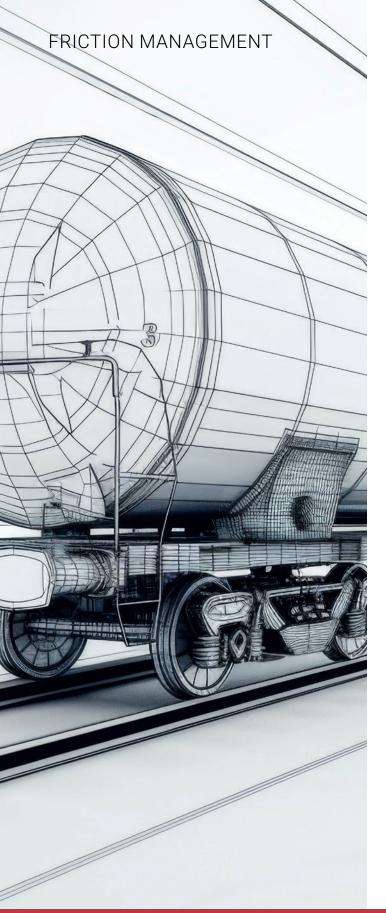
- Intelligent gel dispensing
- > Water-based formulation
- > 75-litre tank capacity
- > Lightweight and portable
- > Viscous gel composition

#### **Benefits**

- > Targeted application ensures optimal adhesion
- > Safe for signalling and environmentally responsible
- > Supports efficient maintenance scheduling
- > Simplifies installation and retrofitting
- > Long-lasting performance on rail surface



Get in touch with our team of experts to learn more about how L.B. Foster's research-led Friction Management Products & Solutions are solving Global infrastructure challenges: uksales@lbfoster.com



L.B. Foster recently conducted a comprehensive user feedback questionnaire to evaluate the performance and usability of its MC4 blades - critical components in rail lubrication systems.

The survey focused on key operational aspects including installation, maintenance, grease pickup efficiency, port performance, and rail fixing quality. The results not only validate the MC4 blades' effectiveness but also provide actionable insights for future product development.

The MC4 blades have demonstrated high levels of user satisfaction across several critical dimensions and feedback on maintenance and port blocking offers valuable guidance for future enhancements.

L.B. Foster remains committed to leveraging this feedback to refine the MC4 blades, ensuring they continue to deliver exceptional value and reliability. This survey reinforces L.B. Foster's dedication to continuous improvement and customer-centric innovation.

## Validating the

of respondents 74% stated that the rail fixing performance is excellent.

69%

of users rated the ports blocking as average.

User feedback confirms performance and reliability

80%

of respondents agreed that the MC4 blades are easy to fit to the rail.

82%

of users agreed that the grease presentation for pickup is good.

70%

of participants indicated that the blades are easy to maintain.

## MC4 blades

Is your organisation looking for a strategic rail partner or a reliable supplier? Meet us at key exhibitions in Europe and Saudi Arabia to discover how you can harness the strength of our **Global Rail** network.

#### Saudi International Rail 2025

Join us in the International Pavilion, where we'll be showcasing our latest rail technologies and smart passenger information solutions - each designed to support Saudi Arabia's transformative rail expansion under Vision 2030.

#### **TRAKO 2025**

Join us in the UK Pavillion at the most prestigious rail industry exhibition in Poland and one of the largest in Central and Eastern Europe.

Our team will be available to discuss how our research-led innovation, deep sector expertise, and global footprint enable us to solve the most complex challenges in rail today.

We'll be advising across our core solution areas and exploring how our technologies can support your organisation's goals—today and into the future.



19th – 20th October 2025 **RFECC, Riyadh, Saudi Arabia** 



23rd – 26th September 2025 AMBEREXPO, Gdańsk, Poland

## Our experts will be advising across our key solution areas:

#### **Control & Command Signalling Panels**

Precision control systems to ensure safe and efficient rail signalling

#### In-Station Dynamic Information Displays

Real-time digital communications that enhance passenger experience

#### **Digital Signage & Advertising**

High-impact visual solutions that monetise station space while informing travellers

#### Trackside & On-Board Friction Management

Reduce wear, extend asset life and improve operational efficiency

#### Rockfall & Floor Monitoring Systems Intelligent hazard detection to protect

Intelligent hazard detection to protect track integrity and safety

#### Wheel Impact Monitoring

Early identification of wheel defects to mitigate costly damage

## Ready to connect?

Scan the QR code to book a meeting with an L.B. Foster sales representative.

We welcome the opportunity to discuss how our solutions can support your business objectives.







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