

Assurance in the Railway Industry



Eurofins York (formerly York EMC Services) is an established market leader for the provision of Electromagnetic Compatibility (EMC) assurance services to the railway industry, offering consultancy, testing and training. We have many years of experience and expertise alongside a solid track record of demonstrating EMC for major railway projects in the UK and worldwide.

EMC in the Railway Industry

EMC is a significant concern within the railway industry. Failures in compatibility within and between systems such as signalling, traction, control and communications can introduce unreliability and compromise the safety of passengers and staff.

Our Expertise

Our in depth knowledge and experience enables us to provide a wide range of services to demonstrate EMC and safety for both fixed installations and apparatus:

- EM hazard identification; desk based studies and on-site inspection
- EMC design reviews including cabling, layouts and zoning
- EMC project management; EMC strategy documents, EMC management and control plans, whole project EMC guidance
- EMC technical documentation preparation including compliance reports
- Computational modelling
- Bespoke measurements
- EMC/EMF site surveys
- On site EMC testing
- Expert witness services

One of our real strengths is our capability to apply our expertise to identifying existing and future EMC problems. We have many years experience of devising diagnostic test methods, defining computational models and providing cost effective solutions to enable the problem to be both solved and understood more clearly.



Services to the Rail Industry

Eurofins York provides comprehensive assistance to the Railway industry, covering: compliance and regulatory issues, EMC Project Management, Network Rail/London Underground specific requirements, on-site and laboratory testing as well as hazard identification and risk assessment, theoretical and computational assessments and problem solving.

Our capabilities and breadth of experience encompass:

Rolling stock

- On-site testing whole vehicles to EN50121-3-1
- UKAS accredited laboratory testing of sub-systems to EN50121-3-2
- Preparing technical documentation and EMC aspects of safety cases

Signalling Systems

- Preparing EMC management plans and compliance reports
- HAZID/HAZOPS
- Laboratory accredited testing to EN50121-4
- On-site pre and post installation EM site surveys
- Fixed installation EMC documentation compilation

Power Supply/Sub-stations

- Pre and post installation on-site testing to EN50121-2
- Equipment testing to EN50121-5
- EMC management plans and compliance reports

Infrastructure

- 'Whole Line' EM site surveys
- Stray current measurement
- Longitudinal and transverse voltage measurements
- Whole depot and station EMC

Training

- Unique "Fundamentals of EMC in Railways" five-day course
- One-day "Essentials of Railway EMC" course
- Bespoke in-house EMC courses tailored to a company's requirements



Eurofins York

Eurofins York is an independent regulatory compliance service provider. With over 25 years' experience Eurofins York is able to offer you a full compliance solution including testing, consultancy, training and Test Instrumentation.

Our UKAS accredited test laboratories located near Bristol, Leeds and in Grangemouth, offer a wide range of EMC, Electrical safety, Radio Equipment and Electromagnetic Fields (EMF) compliance services.

Eurofins York is committed to providing excellent customer support to ensure that your needs and requirements are always met. Our highly trained and experienced staff are available to offer their technical expertise and guidance through the compliance process so that it can be achieved in a cost effective manner and add value to the project.

Our portfolio of services includes:

Testing

Electromagnetic Compatibility (EMC), Electrical Safety (LV), Electromagnetic Field (EMF) site surveys, Radio Equipment.

Consultancy and Research

Planning EMC management strategies, Practical EMC problem solving, EMC legislation.

Training Courses and Workshops

Scheduled workshops and courses in EMC, Electrical Safety, Radio Equipment, EMF and related disciplines including bespoke and in-house training solutions.

Test Instrumentation

Design, manufacture and sale of unique Reference Noise and Signal Sources, compact antennas, Harmonics and Flicker generators and a range of accessories used in EMC test laboratories globally.