

# Emeg Group

## Where Safety Always Comes First



safeNet™ derailer lights © Emeg Group

**E**meg is a company that prides itself on having experienced zero accidents in its entire 25-year trading history.

Its unrivalled safety record is largely due to Emeg Group's Nil-Accident Culture HSE platform (Have you got the NAC?), but a passion for service, quality and safety runs far deeper than that. In fact, safety has been embedded in

Emeg's DNA since the company was founded back in 1997.

**Managing Director, Richard Simmonite, said:**

*"We believe the strength of our company lies in the skills and expertise of its people, working in a diverse portfolio of engineering-based industries. Safety is viewed as a core, top-down business value and we are committed to ensuring the safety, health, wellbeing and welfare of everyone working for or*

*on behalf of the Emeg Group, both here in the UK and overseas."*

**Operations Director, Carl Backhouse, added:**

*"Our NAC platform isn't just something that looks good on tenders, it's something that defines our business-as-usual activities across the entire group. Our safety vision has evolved into a charter that our employees and suppliers must commit to if they want to do business with us."*

## Emeg Group's Safety Commitment

- Safe behaviour is a requirement of working for Emeg Group
- We will ensure our people have the correct tools and equipment to carry out the work
- We will ensure our people have the skills and competency to carry out the work safely
- We will plan our work to ensure it can be done safely
- We will always take five minutes to identify any risks within the immediate work area and make sure they are controlled before starting
- We will stop work if it cannot be done safely
- We will always comply with the site and lifesaving rules
- We will use close calls to report unsafe behaviour and conditions
- We will not tolerate retribution for anyone reporting wrongdoing or suspected wrongdoing
- We will keep our working environment tidy and when the work is completed, ensure the site is left in a safe condition

As well as providing a wide range of depot products (including carriage wash machines, fuelling, fume extraction, controlled emission toilets, ventilation, shore supplies, etc.) plus design and maintenance services, Emeg Group is a leading supplier of depot protection systems (DPS) with its next-generation, intelligent DPS, safeNet™.

### safeNet™ Depot Protection System

In essence, a depot protection system protects rail personnel from the dangers presented by trains in operation on a live depot by ensuring rail vehicle movements are controlled with no risk to staff.

Emeg's safeNet™ Depot Protection System incorporates industry-leading features, such as bespoke software programming, automatic derailleurs and wheelstops, intelligent PLC controllers (ROLOs) with or without HMIs, a PC head end (optional), individual data keys, train detection, visual and audible warning systems and a robust, reliable control network. As well

as meeting and exceeding the safety integrity requirements of SIL 2, safeNet™ is also the world's first DPS system with integrated facial recognition technology.

Uniquely, Emeg's safeNet™ depot protection system can be configured to operate 100% in accordance with specific depot operating procedures and practices, assuming of course that those procedures will result in a safe solution.

One advantage of Emeg's safeNet™ depot protection system is that each system is designed, manufactured, installed and can be maintained by Emeg's own internal staff; no other system offers a full turnkey product and one-stop-shop service.

### Emeg Group's DPS Pedigree

Emeg Group's core engineering staff have been pioneers in developing innovative DPS products for over 40 years, starting with the design and installation of the very first DPS



*New safeNet™ HMI control panel  
© Emeg Group*

at the newly built Norwich Crown Point depot in 1980.

Up to the early 1990s, all rail work in the UK was designed in-house by British Rail, although Emeg's engineers were seconded to the British Rail Board in the 1980s to assist with a complete overhaul of the design for depot protection systems. In fact, some of the drawings referenced in the current UK Network Rail depot protection standard were produced for the British Rail Board by Emeg's engineers.





Since British Rail (which ultimately became Network Rail) ceased all design activities, Emeg's in-house engineering and manufacturing team has designed, manufactured, installed, commissioned and maintained all Network Rail depot protection systems. An essential resource, Emeg is responsible for the provision and support of all aspects of Network Rail's depot protection systems. Maintaining high-quality standards, impeccable service delivery and rapid response via in-house capability is unique to Emeg.

During the installation of a next-gen depot protection system for Network Rail's Leeds Neville Hill Depot in 2019, Emeg's engineers discovered an interface problem with the automatic derailleurs that could be traced back to the original British Rail DPS design from the early 1990s. Unfortunately, *lifeguards*, which are installed on all rolling stock, had not been considered when the automatic derailleurs were originally designed so lifeguards could potentially defeat the automatic derailleurs with disastrous consequences.

Network Rail asked Emeg to undertake studies and to provide a solution that would be adopted throughout all UK depot

protection systems. Emeg produced a revised automatic derailer design that was comprehensively tested with rolling stock lifeguards to ensure it was fully fit-for-purpose. Emeg's safeNet™ derailer system is coordinated with rolling stock lifeguards in such a way that it becomes impossible for a lifeguard to defeat the derailer. As a result, Emeg's revised automatic derailer received PADS approval and is the only automatic derailer that has Network Rail approval.

## A Short History of Emeg's Depot Protection Systems

### 1980 – Norwich Crown Point

Depot protection system for the entire, newly built Norwich Crown Point rail depot. **This was the very first depot protection system.**

Emeg designed and installed a further 20 depot protection systems over the next 15 years, including DPSs at Wembley, Wimbledon and Plymouth, to name a few.

### 1995 – Manchester

Depot protection system and interlocking for Manchester International rail depot.

### 1996 – Heathrow Express

Depot protection system for Heathrow Express rail depot. From 1996 to the present day, Emeg has installed DPSs and manual / automatic derailer systems at more than 30 rail depots all over the UK, from Penzance to Newcastle and everywhere in between. This includes standard rail depots as well as international, heavy maintenance, reception sidings, Crossrail rolling stock assembly factories and metro facilities.

Recent projects include a return to Network Rail's Neville Hill TMD in Leeds to carry out a comprehensive upgrade of the diesel multiple unit (DMU) building and a new safeNet™ design and installation at the Howdon Satellite Depot, just outside of Newcastle, which serves the Tyne and Wear Metro operated by Nexus. Emeg Group were appointed by Buckingham Group Contracting Ltd (BGCL) as its preferred railway M&E engineering service provider for the project.

To find out more about Emeg Group and the safeNet™ intelligent depot protection system, or to download the latest product catalogue, visit [www.emeg.co.uk](http://www.emeg.co.uk) or call +44 (0)1246 268678 to learn how Emeg can improve safety, productivity and efficiency on your next rail project.

You can also **visit the team on Stand C20 at the Middle East Rail Expo in Dubai on 12 & 13 October 2021.**





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## A TRADITION OF RAIL EXCELLENCE

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With headquarters in Chesterfield and international offices in Dubai, we provide a range of specialist design, M&E and maintenance services and innovative depot solutions to rail operators around the world.



**20 YEARS OF  
RAIL EXPERTISE**



**AN UNRIVALLED  
SAFETY RECORD**



**100% FOCUSED ON  
THE RAIL INDUSTRY**



Visit us at the Middle East  
Rail Expo on **Stand C20**  
12-13 October 2021

[www.emeg.co.uk](http://www.emeg.co.uk)