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# Emeg Group

## A Conversation with Railway Depot Specialist Emeg Group

In the midst of a busy year for Emeg, we caught up with Emeg Group President Carl Backhouse to hear about some of the company's past, prestigious successes as well as exciting, upcoming projects.

**Railway-News: You provide mechanical and electrical engineering services for the rail sector. Your headquarters are in Chesterfield and you are a Network Rail-designated Principal Contractor, but you do have an international office in Dubai. What are some of the international projects you have worked on?**

**Carl Backhouse, Emeg Group President:** Recent international projects include the design and build of the main depot at Al Faya, the largest and most important O&M facility in the Etihad Rail network in Abu Dhabi. In fact, we've just shipped the first batch of e-fill™ units, our intelligent fluid mixing solution, from our Manufacturing & Distribution Centre in Chesterfield for installation at the Al Faya depot. It's a great honour for Emeg to be involved with such a high-profile and prestigious rail engineering

project, which will bring so many benefits to the Middle East. We're also working on a new project with Saudi Arabia Railways, namely, the Al Qurayyat depot in Saudi Arabia. The Al Qurayyat depot plays an important role in the 1,242km Riyadh–Qurayyat network so again, it's a real feather in Emeg's cap to have been appointed to work on it.

**RN: One of your areas of expertise is in railway depots. I believe you were involved in a facility for Bombardier Transportation (now Alstom) in Derby for the testing of the new Crossrail trains. What was your brief there?**

**CB:** Yes, that was a 24-month project for Balfour Beatty to build a new 10,000m<sup>2</sup> V-Shop facility to enable the final test and sale of trains for the Crossrail project. Emeg supplied a range of electrical services, the interlocking system,



*Carl Backhouse, President, Emeg Group*

gas heating, ventilation and cooling systems, and compressed air solutions.

As well as supplying and installing key operational components, our Manchester-based design team were heavily involved with planning, surveying existing services, consulting and designing the overall scheme with the client – from concept through to build. This included Level 3 Building



Information Modelling (BIM) via our e-scan™ solution, lighting design, M&E building services, and fire alarm & security systems.

**RN: You supply a depot protection system called safeNet™. How does it help make depots safer places to work?**

**CB:** A depot protection system (DPS) 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™ DPS incorporates industry-leading features and exceeds the safety integrity requirements of SIL 2. safeNet™ is also the world’s first DPS system with integrated facial recognition technology.

Uniquely, safeNet™ can be configured to operate 100% in

accordance with specific depot operating procedures. Another advantage of safeNet™ is that each system is designed, manufactured, installed and maintained by Emeg’s own in-house staff; no other system offers a full turnkey product and one-stop-shop service.

Emeg’s safeNet™ automatic derailer system has received PADS approval and is the only automatic derailer system that has Network Rail PADS approval.

**RN: Something that passengers see more so than depots of course is stations. You participated in the Euston Station remodel. What did your client, Balfour Beatty, contract you for?**

**CB:** We are mainly focused on rail depots, either new-build projects or depot upgrade works, but we’ve also worked on many station

refurbishment projects. The Euston Station remodel was a high-profile project for us, it being the sixth-busiest station in Britain. The project consisted of the provision of new retail spaces and the refurbishment of existing retail spaces (including the food hall), formed around a new mezzanine deck extending over the existing concourse. Once again, our design team were heavily involved in the creation of the Form 003 design.

If you’ve visited Euston Station since 2016, you’ll hopefully agree that the results speak for themselves.

**RN: Can you tell our readers about some interesting projects you have in the pipeline for this year?**

**CB:** We have lots of exciting plans for 2022, including a stand at Middle East Rail 2022 in Abu Dhabi – the largest and most established



international transport event in the Middle East. We are also Gold Sponsors of this year's prestigious exhibition.

Project-wise, we have 3 new fuelling projects coming up as a Principal Contractor for Network Rail. The £2m+ contract consists of the overhaul of fuelling systems at Blackpool, Barrow-in-Furness and Newton Heath depots.

We've also been appointed by Buckingham Group Contracting Ltd (BGCL) to undertake a comprehensive schedule of work on a huge £35m improvement project at the Etches Park rail depot in Derby for East Midlands Railway. This vital upgrade work is necessary ahead of the arrival of the new

Aurora train fleet in 2023.

We're also working on the new Thanet Parkway Station in Kent for BAM Construction. This is an interesting project for us as the brief requires us to build a new station right next to an existing line, which obviously comes with a unique set of safety and logistical challenges.

All in all, 2022 is looking to be our busiest year to date, with lots of large-scale rail projects to challenge us at home and overseas, but we wouldn't have it any other way.

Bring it on!

To find out more about Emeg Group and its unrivalled range of full turnkey depot products and in-house services, or to download the latest product catalogue, visit [www.emeg.co.uk](http://www.emeg.co.uk) or call +44 (0)1246 268678.



**Introducing Emeg Group's industry-leading, PADS-approved, SIL2-compliant intelligent Depot Protection System (DPS). A full turnkey solution and the world's first DPS with integrated facial recognition technology!**

### **Why safeNet™ is No. 1**

- Ensure safety of rail personnel from the train in operation.
- Ensure rail vehicle movements are controlled with no risk to staff.
- Flexible, user-friendly intelligent network distribution system.
- safeNet™ can be tailored to suit existing depot procedures.
- Interface with existing depot systems and processes.
- Remote monitoring and integrated facial recognition.
- Complete turnkey solution.
- Network Rail PADS-approved automatic derailer assembly.

**Pioneering Innovative Depot Protection Systems for 40+ Years!**  
**Find out more at [www.emeg.co.uk](http://www.emeg.co.uk)**