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Selite

Low-Frequency EMC Problems? Selite Is a Problem Solver



f you have a problem with electromagnetic emissions and want to be relieved of the technological complexity the development of effective EMC shielding requires, SELITE is a qualified partner capable of analysing, studying, designing, prototyping, producing and delivering innovative electromagnetic shielding for low-frequency emissions.

In a world that is increasingly complex from a regulatory standpoint and more and more 'electric' in terms of mobility, electromagnetic shielding is essential to ensuring the proper functioning of sophisticated transport and signalling systems, and to protecting passengers from

continuous and prolonged exposure to electromagnetic fields as well.

Over 20 Years' Expertise in the Railway Industry

The experience gained in a complex field like the railway sector has

enabled the company to develop low-frequency EMC shielding technologies and processes that can respond effectively and promptly to various customer needs:

- Ensuring compliance with EMC compatibility standards
- Ensuring the proper operation



- of on-board systems
- Protecting the safety and health of people

Like all transportation systems, the railways are also evolving: ERTMS will be adopted all over Europe, bringing significant benefits to the industry in terms of sustainability and safety. SELITE has been working for years with leading companies in the rail industry to meet all the technical regulatory requirements and design the most appropriate low-frequency EMC shielding to protect the ERTMS equipment from possible interference. Now more than ever, effective and efficient shielding is important to ensure the reliability of the entire system and enable its deployment throughout the entire European network.

How Can SELITE Solve Your Low-Frequency EMC Problems?

Working for the railway industry means not making mistakes: standards consider only zero-defect solutions, because passengers' maximum safety on board depends on the proper operation of the train. This is why SELITE has developed SKUDOTECH®, an innovative shielding technology with unique shielding capabilities.

Thanks to its strengths, SKUDOTECH® technology is the real and practical answer to any lowfrequency EMC shielding problem:

- Effectiveness: it cuts down over 99% of EMC emissions, 4 times more than traditional material.
- 2. Lightness: the possibility of using very limited thickness,

even as low as 0.1mm, is crucial for applications that need to be extremely light. Reducing the weight of a transport vehicle has a positive impact on performance, as well as on energy consumption and the environment.

- Practicality: it is also easily applicable to existing solutions.
- Reliability and durability: it is resistant to corrosion and its effectiveness exceeds the life of the device.
- Sustainability: at the end of the lifecycle of the train or the component it is easy to separate, process and reuse because it is 100% recyclable.
- 6. Versatility: it adapts to the design without compromising the performance of the vehicle. For example, with SKUDOTECH® technology high-tension cables can be wound on to trains without excessive and bulky structures.

Have You Faced an EMC Problem Late in the Day?

SELITE designs low-frequency EMC shielding from scratch (native shielding), but is often involved in EMC shielding projects for existing products, facilities or components that need more effective shielding (adaptive shielding).

This dual approach allows SELITE to move nimbly within an industry that is complicated, not least from a regulatory point of view, and to respond promptly to

customer needs. SELITE is both an experienced and highly qualified partner when involved in the early stages of a project, as well as a consultant ready to solve problems and find solutions when the need and urgency arise to shield products or installations that are in progress or already in existence.

In a nutshell, SKUDOTECH® technology can be applied at each stage of an EMC shielding project: before, during and after. It is this versatility, combined with SELITE's adaptive approach, that brings significant benefits in terms of:

- Reduced time to market
- Cost savings

Many companies successfully manage EMC shielding in-house. But low-frequency EMC shielding, because of its technological complexity, often requires the involvement and support of a reliable outside expert ready to help, like SELITE.



