

Enhanced Vibration Control Technology for Ballasted Rail

Leniter Ballast Mat System

Rail lines and surrounding areas are subjected to significant vibration generated by the passage of rolling stock. This structural vibration can have a significant negative impact for both the track system and the neighbouring communities and businesses.

An under-ballast solution, Trelleborg's Leniter Ballast Mat system is installed directly under the ballast, providing vibration isolation and protection to the track components. The system extends the period of track availability between rail tamping scheduled maintenance, alongside delivering the environmental benefit of reduced disturbance, through a reduction in local noise pollution.

Trelleborg's Leniter Ballast mat system is a fit and forget solution, tailored to each individual application to meet and exceed the required attenuation targets. Installing a combined Leniter Ballast Mat and reduced ballast system, offers improved performance compared to a ballast only system.

Trelleborg works closely on each project to understand the requirements and deliver the optimum solution, making Trelleborg the ideal partner for the unique challenges of extending track life, improving environment concerns and increasing return on investment.



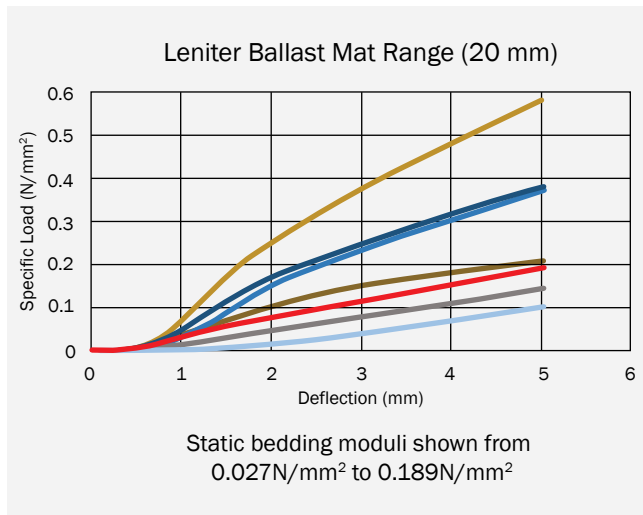
Leniter Ballast Mat shown in orange

Actual ballast mats are black/grey in colour

Features & Benefits

- Tunable attenuation properties and dimensions; there is no compromise on performance
- Flexible and durable material
- Long product life lowering the overall long-term cost of track installation
- Enhanced noise attenuation; improving the noise levels for local communities
- Extends the life of ballast; improving revenue potential through increased track availability

Leniter Ballast Mat Technical Properties



Customization

The Leniter Ballast Mats can be customized to meet your specific project requirements. The frequency of absorption can be tuned by both altering the thickness and density. With enhanced mechanical properties compared to traditional ballast mats, Leniter Ballast Mats are suitable for a wide range of challenging environments.

Designation: Trelleborg Leniter Ballast Mat

Material: Closed cell foamed elastomer

Bedding Modulus: 20-200 MN/M³

Speed Rating: ≤200 kph

Strip Dimensions

Width: 1000 mm

Nominal Thickness: 10-30 mm

Length/strip: up to 10 m

Density: Approx. 500 kg/m³

Environmental

- Low water absorption
- Resistant to common chemical contaminants
- Abrasion resistant
- Resistant to UV and microbial attack

Dynamic Performance

- Extended linear deflection range
- Low dynamic stiffening
- Enhanced vibration attenuation
- Performance over a wide range of line speeds

EPDM waterproofing membrane is available.
For more information please contact us.

Contact Us

Trelleborg Applied Technologies delivers innovative and reliable solutions, materials and smart systems that maximizes performance for our customers. Our dedicated and highly skilled staff are always on hand to provide seamless process support from initial idea, through to delivery and beyond.



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