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GEØabrics®

Performance You Can Trust, Reinforcement Where It's Needed



rackTex – The Anti-Pumping Geocomposite

Amongst the headaches faced by rail operators and contractors are issues caused by problem areas of ballast contamination in trackbeds. One solution is re-ballasting – however this is only successful for a limited period and the problem will resurface. The cost implication of regular, ongoing maintenance is significant but can be avoided with a specialist solution to mud pumping in place. And this is where TrackTex comes in. TrackTex is a patented, antipumping geocomposite. The result of more than a decade of research by trackbed engineers, its unique filter system improves trackbed quality over time. It's been proven to significantly increase maintenance intervals – by more than 25 times.

A Solution with a Worldwide Track Record

Globally, the rail industry has been actively using TrackTex since 2010 – and enjoying the significant cost savings that come with it. Some of the world's leading operators have already installed TrackTex as a spot treatment. These include Network Rail (UK), ProRail (Netherlands), Norfolk Southern, Union Pacific, Canadian National, Canadian Pacific (USA/Canada), amongst others.

There's now more than 8 million square feet of TrackTex installed within Europe, Australia and the United States to date – a statistic which speaks volumes about its efficacy. Site monitoring across a number of key sites has also resulted in clear evidence of



TrackTex success. It's now accepted as the most cost-effective way of preventing and correcting mud pumping failure by many rail operators.

TrackTex + Geogrid: Additional Reinforcement, Long-Term Reassurance

Not all ballast contamination is equal – and some trackbeds face more serious issues, calling for additional reinforcement. With this problem in mind, a version of TrackTex has been developed that incorporates a geogrid on top – TrackTex G. This is a specialist solution for areas of track with a low bearing capacity.

So How Does TrackTex G Work?

There are three main functions of TrackTex, when it's used between ballast and the subgrade: separation, filtration and drainage.

TrackTex G takes it a step further through adding reinforcement. The geogrid provides additional strength to soils to enable ballast to be constructed over weak and variable soils. Geogrid installed over unstable subgrades may eliminate the necessity to replace this soil, increasing the load-bearing capacity of the system by distributing the stress more evenly.

The geogrid's properties and composition provide long-term resistance to mechanical and chemical degradation – even under aggressive conditions. This is why



it's a proven solution to problems faced by rail operators.

GEOfabrics's Dutch partner and distributor of TrackTex, Alom, has recently experienced an increased use of TrackTex G with ProRail in the Netherlands – not just in problem areas but across other projects. For areas with pumping issues, TrackTex G not only prevents fine particle migration but the addition of the geogrid mitigates the risk of failure, due to low CBR, providing additional peace of mind.

Solving a Stability Issue in the US

In Detroit Lakes, MN, a frequentlytrafficked diamond crossing, operated by Canadian Pacific and BNSF, had experienced frequent fouling because of mud-pumping – this led to a weakened track modulus.

The use of a geogrid above the anti-pumping geocomposite was incorporated to provide additional stability, prior to placing new ballast – all installed without the need for specialist equipment. Rob Hepworth, Sector Manager at GEOFabrics explains, "TrackTex is the go-to solution for preventing the migration of subgrade fines on a trackbed. In combination with a Geogrid, this provides reinforcement to the subgrade. Out of the four geosynthetic functions required on a trackbed, TrackTex G performs them all in one product, giving users and engineers peace of mind that no geotechnical failure will occur."

Find Out More Here:



Get in touch for more details

Europe, Asia & Africa

Rob Hepworth rhepworth@geofabrics.com +44 7836 723 805

USA & Canada

Eric Littel elittel@geofabrics.com +1(704) 954-4927



Anti-Pumping Geocomposite



Increase trackbed maintenance intervals by more than 25 times

- Proven performance
- Improved track quality
- Durable in extreme conditions
- No specialist equipment required
- TrackTex G: Additional reinforcement with added geogrid now available



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