

Vakblad voor Railbedrijven

Isolated Track from Canada Installed for the First Time in Europe

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In the 'loop Keizerswaard' of Rotterdam city carrier RET exists a 1.2 kilometer isolated track using a new methodology in Europe: Polycorp Ltd. Rail Encapsulation. This technique is applied in order to prevent the underlying gas pipe from being corroded by stray electrical currents.

ETS Spoor has joined with Canadian manufacturer Polycorp Ltd., who has existing US and Canada insulation methods that have been adapted for European railways. Contractor Van den Heuvel Infra, which was requested by ETS Spoor, affixed the materials to the tram rails in Rotterdam. ETS Spoor is the supplier of railway materials.

Stray Current

The developed solution is the best material to use because it utilizes a long, one-piece rubber casing that is easy to fix to tram rails. Because this is a completely closed system, there is no longer current leakage to ground [like 3-piece casing designs common in Europe]. This is important, because stray current can very quickly corrode underlying pipes and cause failure.

"The stray current seeks the path of least resistance and then sometimes goes through the ground. The negative aspect of stray current is not only that the gas pipe will corrode, but also the rails may be affected." said Don Hensen of Van den Heuvel Infra. "You want to have a closed circuit, because in addition to damage, stray current means loss of power."

Solution

Isolation of rails is not new. The European application of Polycorp method is, however, because of the unique one-piece construction. Also as a result, the insulation system around rails may be installed in a very short time. Moreover Polycorp sheathing isolates

nine times better than that prescribed by the EN standard. An additional advantage of the Polycorp sheathing is that the solution shows a reduction in vibration and noise.

Upon request, the performance test values can be given to track administrators. Also, Polycorp can recommend an installation program for the application of the jacket to the rail, so that the track can easily be removed and maintained in the future. More information about the application can be obtained from ETS Spoor.

