

Improvement of Noise Insulation Material for a Rail Joint

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We developed a noise insulation material to reduce the noise around a rail joint. However, as a result of the measurement conducted at a commercial line, it is revealed that its performance of noise reduction is insufficient especially because that of the reduction of the noise generated by sources other than the rail is a little poor. Consequently we have improved the material and decided to use two sorts of materials together with the original material; one is a sound absorptive material for the railway track, the other is a rail insulation material for the usual rail. As a result of the measurement at the same point as the previous measurement, it is found out that the materials have sufficient performances to reduce the noise level by about 3dB around the rail joint.