

The Aerodynamic Noise Reduction by Porous Materials and Application to a Current Collector

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Reduction of wayside-noise along railway lines is essential to realize further speed-up of high-speed trains. Especially, aerodynamic noise is a main noise source therefore it has become increasingly important to reduce the aerodynamic noise. A new aerodynamic noise reduction method which covers an object surface with a certain porous material has been developed recently. Wind tunnel test with a cylinder and a pantograph shows this method is effective to reduce aerodynamic noise. This paper shows experimental results of the wind tunnel test.