



Overview and specification of low noise moving model test facility

Low-Noise Moving Model Test Facility Completed at RTRI

A low noise moving model test facility was newly completed at RTRI. This test facility, featuring the world's highest performance in its class, is capable of launching a 1:20 scale model train with a real, 3-dimensional nose shape at the maximum speed of 400 km/h, and accurately reproducing the air flow and turbulence created by a running train. It was completed on July 10, 2020 and testing began on October 29, 2020.

[Planned testing and experiments]

The low noise moving model rig will be used to analyze the air flow and pressure fluctuations caused by various three dimensional train and influstructure shapes. The followings are examples of planned testing: (1) experiments to analyze the aerodynamic phenomena caused by a passing train, (2) experiments to reduce micro-pressure waves by optimizing the shape of the train's nose, and (3) gathering data to develop numerical simulation methods.

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Measuring section