

Title:

Full-scale test for verification to put MPVC into practical use for tunnels with the concentrated exhaust system at portal

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ABSTRACT

Model-based Predictive Ventilation Control systems (MPVC) have been chosen in Japan for tunnels with concentrated portal exhaust. The structure of MPVC systems is easy to understand and its controlling parameters can be adjusted easily. This feature arises because clear roles are played by dynamic models of traffic and airflow. The practical development of MPVC has proceeded for four years and it is now an effective ventilation control method for the tunnels with concentrated portal exhaust systems. The method might be developed for other types of tunnel in the future.

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