Running Simulation for Practical Application of the Active Steering Bogie System

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Active steering bogie systems have been developed to ensure both the running stability and curving performance of railway vehicles. A numerical simulation is performed to clarify the relationship among the steering moment or the bogie angle and the lateral force reduction effect. The simulation has shown that the best control method for the overall vehicle system is to steer both front and rear bogies in the same direction of the curve so that both bogie angles get close to the geometrically ideal bogie angle in the circular curve section. We will continue to conduct research while verifying it in a running test to put the steering system into practical application.