

An Application of Assist Steering System for Bogie Angle Linked Steering Truck

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The authors have developed an assist steering bogie system using hydraulic actuators to improve curving performance on narrow gauge line railway vehicles. This system is applicable to ordinary bogie angle linked steering systems. Some numerical simulations are carried out to check the reduction effect of the lateral wheel load, furthermore a running test using an actual vehicle is conducted. These examination results have shown the assist steering bogie system is capable of reducing the lateral wheel load at transition curve sections. Although further studies concerning fail-safe functions are needed to apply these steering bogie systems into practical use, a considerable potential of the system can be confirmed.