

Fundamental Tests of Assist Steering System for Bolsterless Truck

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In order to decrease the lateral force generated in the railway vehicles in the curve sections of the railway track, a simple steering system that was able to be applicable to the bolsterless bogie was developed. The mono-link with the actuator function is used, and an appropriate steering force is added to supplement self-steering characteristic of the wheel-sets. The authors have designated this system as an "assist steering system". In this paper, we report the result of fundamental running test in the test line on the Railway Technical Research Institute premises. As a result of the test, it is found out that the average lateral force of the vehicle in the circular curve section is decreased by about 30% compared with that under no assist steering control.