

An Evaluation Method of the Braking Performance Using Bogie Traction Force

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The adhesion coefficient between rails and wheels of the railway vehicle is reduced under rainy weather, so it is difficult to obtain high braking performance. In general, the braking performance of the train is evaluated to be based on the stopping distances and the deceleration which can be obtained by calculating the rotational velocity of the wheel. However, braking performance degradation is caused by the complex combination of the bad condition of the adhesion coefficient between rails and wheels, the friction coefficient of blending materials and the wheel slip control. In order to investigate the factor of the degradation of the braking performance in the high speed train or the shortening of the braking distance, it is desired to measure the variation of the braking force at each bogie. We have developed an evaluation method of measuring the braking force of the actual vehicle with the force acting on the single link. In this paper, the results of a running test by means of this evaluation method of the braking performance using bogie traction force are reported.