Search Method of Wheel/Rail Contact by Three Dimensions

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In order to consider the attack angle between wheel/rail and the change in the cross-section shapes of rail in the train traveling direction, the search method of contact point by three dimensions was developed. Moreover, we investigated the contact point search by three dimensional methods for tongue rail. In addition, we evaluated the curving performance and the running safety by vehicle dynamics using the result of contact point analysis. As the result, it has been understood that the change in the contact point by the attack angle exerts little influence on the curving performance.