

**Experimental Identification of Wheel/Rail Friction Coefficient in Boundary
Lubrication State**

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When calculating the adhesion coefficient between wheel and rail during rainfall by applying the Mixed Lubrication Theory, the friction coefficient (referred to as boundary friction coefficient) of the contacts between asperities of wheel and rail is one of important parameters. However, its value has been assumed arbitrarily in theoretical calculation so far, therefore, the precision of adhesion coefficient obtained by numerical analysis has been unsatisfied. In order to resolve this problem, this study carries out experiments for estimating the boundary friction coefficient by means of a rolling-sliding friction machine under wet conditions, and find out the boundary friction coefficient is in an average value of 0.5.