

**Locating of the Contact Position between the Wheel and the Rail
by means of Thermos-graphic Images**

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It is necessary to specify the contact position between the wheel and the rail with due accuracy for estimating the dynamic characteristics of vehicles. However, since a camera cannot be mounted close to the rail-head level, to locate the contact position while the vehicle is running was not possible in the previous studies. In this study, in order to locate the contact position between the wheel and the rail, a new method of digitalizing the contact position on a thermal-image is proposed based on the method presented in the Burstow's study, and an experiment in locating the contact position is carried out using an actual coach in the RTRI test line. As a result, we confirmed the contact position between the wheel and the rail with due accuracy while the coach was running under environmental conditions suitable for using the thermos-graphic camera. In addition, this paper describes the usability of our proposal by its application to a previous experiment in derailment.