

Development of Monitoring Technique for Railway Vehicle Components using Infrared Camera System.

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ABSTRACT

The faults in railway vehicle core components may result in the stoppage of the service or the serious accidents such as derailment of the vehicle. Therefore, it is important to diagnose and monitor the main components of a railway vehicle. The use of Infrared camera system is one of the attractive methods for the diagnosis of abnormal conditions in the components of a railway vehicle, such as bearings, reduction gears, brake discs, wheels and traction motors. This paper presents the research results about the diagnosis of the rotational components using infrared thermography. A pattern recognition technique and field test results are presented. The results show that this method of diagnosis using infrared thermography can be used to identify abnormal conditions in components of a railway vehicle.