

New Experimental Device to Investigate Creep Force between Wheel and Rail

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The authors have produced a new experimental device to investigate creep forces between wheel and rail. The device as termed “Creep Tester” is applicable to existing rails, and the wheel of the Creep Tester is capable of rolling on the existing rail while altering longitudinal creepage generated by a mechanism specific to the device. The Creep Tester is also equipped with a mechanism to set some yaw angles of the wheel to induce lateral creepage. In addition to some other features: i.e. a short measuring time, setting of some range of normal force, the device is advantageous to investigate what parameters affect on the creep force characteristics.