

## Slipping and Skidding Occurrence Probability Decreasing by Means of the Friction Controlling in the Wheel-Braking Pad and Wheel-Rail Contacts

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The paper considers the question of slipping and skidding occurrence probability decreasing by means of the friction controlling in the wheel-braking pad and wheel-rail contacts. One of the methods of stabilization of the friction in the pairs is a temperature control system based on the use of constructive and technological elements for the absorption and removal of heat from the friction pairs to the environment. The variants of technical solutions on multifunctional (temperature, abrasive) controlling tribocontacts by energy of air, air-abrasive stream or pellets of dry ice, electrically charged sand supply are proposed. Achieving optimum amount of supplied sand to the wheel-rail tribocontact is proposed through its charging using tribostatic or electrostatic methods. Presented the results of experimental research on the "Friction Machines" are the dependencies of the friction coefficient on the temperature.

**Keywords:** "Wheel-Braking Pad-Rail" System, Friction Machine, Temperature, Friction Coefficient

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