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INFLUENCE OF SLIDING SPEED ON DYNAMIC FRICTION IN TIRE CONTACT

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The contact path of the braking tire is separated in two regions due to braking effort. In the first named "adherence" region, dominant is deformation component of the slip and there is no move between tire and road surface.

The second region, adjoining the first, is the sliding region. Sliding speed, which is the dominant in this region, has great influence on realized friction in the contact.

Formulated differential equations of the sliding speed, available and obtained friction within the contact path, were calculated. Calculations were based on indoor nad outdoor tire measurements. Presented equation may be incorporated in the friction model of tire. The purpose is more exact anticipation of friction behaviour of the braking tire.

Key words: *sliding speed, friction, contact path, tire.*

UTICAJ BRZINE KLIZANJA NA DINAMIČKO TRENJE U ZONI DODIRA PNEUMATIKA I TLA

Kontaktna površina kočenog točka je podeljena na dve regije proizvedene efektom kočenja. U prvoj, tzv. "regiji prijanjanja", dominira komponenta deformacije, pa nema relativnog kretanja između pneumatika i tla.

Druga regija je "regija klizanja". Brzina klizanja, koja je ovde dominantna, ima velikog uticaja na ostvareno trenje u zoni kontakta.

U radu su date diferencijalne jednačine kojima se preko brzine klizanja u zoni dodira, sračunava trenje. Izračunavanje bazira na merenjima na unutrašnjoj i spoljašnjoj strani pneumatika. Prezentirane jednačine mogu da se inkorporiraju u model kojim se simulira trenje pnumatika. Rezultat je dobijanje frikcionih osobina kočenog pneumatika.

Ključne reči: *brzina klizanja, kontaktna zona, pneumatik.*