SUMMARIES
REZIMEA

***Mile Raičević*[1], *Miroslav Demić*[2], *Halid Bogilović*[3], *Predrag Milenković*[1]**
[1] *"Zastavaautomobili"a.d., Kragujevac, Serbia, e-mail: m.raicevic@automobili.zastava.net*
[2] *Mechanical Faculty, Kragujevac, Serbia, e-mail: demic@kg.ac.rs*
[3] *BH Telecom, Sarajevo, BiH, halid.bogilovic@bhtelecom.ba*

RESEARCHING THE INFLUENCE OF THE BRAKE SYSTEM CONFIGURATION ON VEHICLE'S BRAKING PARAMETERS

UDC : 629.11- 592.5

Abstract
The optimal braking force distribution to the vehicle's front and rear axle is crucial for the vehicle's stability during the straight line braking. Considering the fact that the braking torque that can be applied to the wheel depends on the applied brake actuator, it is important to examine what happens to the braking performances of the vehicle when the disk brakes are mounted on the rear axle instead of drum brakes and what happens when the vented disk brakes are mounted on the front axle instead of solid disk brakes. For comparison of the braking performances, experimentally obtained data for an ABS equipped vehicle - Zastava Florida was used. The data for the above mentioned vehicle was collected while the vehicle was performing straight line braking. In order to analyze the influence of the measured values on the speed of the vehicle, the partial coherence functions on the braking pedal force and the pressure of the front and rear lines for the output value of the vehicle's speed was used. In order to make an adequate comparison of the vehicle's braking parameters FADE test was also conducted.

Keywords: brake, disk, drum, coherence

ISPITIVANJE UTICAJA KONFIGURACIJE KOČIONOG SISTEMA NA PARAMETRE KOČENJA VOZILA

Rezime: Optimalna raspodela kočnih sila na prednju i zadnju osovinu vozila je od presudnog značaja za stabilnost vozila tokom pravolinijskog kočenja. U skladu sa činjenicom da kočni moment koji se može preneti zavisi od kočnog aktuatora, važno je istražiti šta se događa sa kočnim performansama vozila kada se na zadnje točkove umesto doboš postave disk kočnice i kada se na prednjoj osovini umesto običnih postave ventilirajuće disk kočnice. Za poređenje kočnih performansi korišćeni su podaci dobijeni eksperimentalnim istraživanjima na vozilu Zastava Florida. Podaci su prikupljani tokom pravolinijskog kočenja vozila. U cilju analize uticaja izmerenih veličina na brzinu vozila (izlazna veličina sistema) korišćene su parcijalne funkcije koherenci sile na pedali kočnice i pritisaka u kočnoj instalaciji prednjih i zadnjih točkova. Da bi se izvršilo adekvatno poređenje kočnih parametara vozila sprovedeni su i FADE testovi.

Ključne reči: kočnice, disk, doboš, koherencija