SUMMARIES
REZIMEA

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THE SENSITIVITY ANALYSIS AND THE OPTIMIZATION OF SUSPENSION GEOMETRY PARAMETERS OF BUS STEERED WHEELS

Steered wheels suspension geometry of bus is of great importance for exploitational characteristics, since it affects vehicle's handling (stability of steered wheels), loading of steering system elements and suspension and tire wear. The mentioned phenomena are related to driver's fatigue, therefore a considerable attention must be devoted to the optimal choice of those parameters, both in the phase of design and during the bus service life.

In this paper an attempt was made to develop an analytical method for determination of orientational values of the steered wheels suspension geometry parameters in the bus design phases. The method is based on the front wheels shimmy minimization, and aligning torque maximization, for the circle motion with constant speed.

Key words: *bus, steered wheels suspension geometry, shimmy, aligning torque, optimization.*

ANALIZA OSETLJIVOSTI I OPTIMIZACIJA PARAMETARA GEOMETRIJE OSLANJANJA UPRAVLJAČKIH TOČKOVA AUTOBUSA

Geometrija oslanjanja upravljačkih točkova autobusa je od velikog značaja za eksploatacione karakteristike, jer utiče na upravljivost (stabilnost upravljačkih točkova), opterećenje elemenata sistema za upravljanje i oslanjanje i habanje pneumatika. Pomenuti fenomeni su povezani i sa zamorom vozača, pa se pravilnom izboru pomenutih parametara mora posvetiti posebna pažnja, kako u fazi projektovanja tako i u toku održavanja vozila.

U ovom radu je učinjen pokušaj da se razvije analitička metoda za određivanje vrednosti parametara geometrije oslanjanja upravljačkih točkova u fazi projektovanja autobusa. Metoda je zasnovana na minimiziranju lepršanja i maksimizaciji momenata stabilizacije upravljačkih točkova pri vožnji konstantnom brzinom po kružnoj trajektoriji.

Ključne reči: *autobus, geometrija upravljačkoh točkova, lepršanje točkova, moment stabilizacije, optimizacija.*