

Snežana Petković, Miroslav Pećanac,
Faculty Of Mechanical Engineering Banja Luka, Republic of Srpska, BiH

INFLUENCE OF DIFFERENT MIXTURES OF ETHANOL AND UNLEADED GASOLINE ON ENGINE PERFORMANCE

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Abstract

Among all the fuels produced from the renewable sources, in addition to biodiesel, alcohols are considered the most acceptable alternative fuel. Bioethanol has numerous advantages compared to gasoline, primarily because of reduced CO₂ emission.

Ethanol is used in the various ratios with gasoline. Problem with the mixture is the separation. In this paper we have presented our investigation of influence of different mixtures of ethanol and unleaded gasoline on engine performance. At first, the stable mixture for the certain climate conditions was chosen and afterwards the engine tests of chosen mixture were made.

Keywords: unleaded gasoline, ethyl alcohol, ecology, engine performance

UTICAJ RAZLIČITIH MEŠAVINA ETANOLA I BEZOLOVNOG BENZINA NA PERFORMANSE MOTORA

Rezime : "Od svih goriva koja se dobijaju iz tzv. obnovljivih izvora, pored biodizela, alkoholi se smatraju kao najprihvatljivije alternativno gorivo. Bioetanol poseduje niz prednosti u poređenju sa benzinom, najviše zbog njegove manje emisije CO₂.

Etanol se koristi u kombiunaciji sa benzinom u razlicitim procentualnim odnosima. Problem koji se sreće kod ove mešavine je njihovo razdvajanje. U ovom radu je predstavljeno istraživanje koje smo sprovedi a koje se odnosi na uticaj različitih odnosa mešavine etanola i bezolovnog benzina na performanse motora. Najpre, je u određenim klimatskim uslovima odabrana stabilna mešavina a nakon toga su izvršena testiranja motora pogonjenog ovom mešavinom.

Ključne reči: bezolovni benzin, etil alkohol, ekologija, performanse motora"