



Diesel Fuel Which is Traded in the Republic of Kosovo and its Performance on Vehicles

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Abstract: The main aim of this paper is to study the quality of diesel fuel traded in the Kosovo market, in the context of general monitoring of hydrocarbons quality. Discussion of experimental results will be related mainly to the performance of vehicles and their dependence on diesel fuel quality, without avoiding compliance of fuel parameters with International Standards and Administrative Guidelines of the Republic of Kosovo. Also, the study of the motoric performance and characteristics of the diesel are reviewed for all kinds of vehicles, as engine and fuel are valued as the only functional system. In the parameters that determine the performance of diesel engines work, the paper focuses on the impact of the quality indicators of fuel in terms of starting the engine (ignition), motor power, noise, fuel economy using, wearing of engine parts and cleanliness. For specific cases, to which the Republic of Kosovo is not excluded, also the impact of fuel is seen in relation to the operation at low temperature, stability of fuel and obtaining fuel smoke, as pollutants along with sulphur content. For evaluation of all motor performance parameters, for qualitative indicators of diesel samples, computer programs are used, by which the determination of the parameters that affect the environmental and motoric performance of vehicles is made possible, but without evidencing in the report the analyzes of testing laboratories. Processing is mainly focused on the Engler distillation data to determine the beginning of the boiling temperature, a parameter that confirms the obtained values for flare temperatures in closed cup.

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