Fuel Consumption Tabulation in Laboratory Conditions

Mosttafa Alghadhi, A Ball, L E Kollar, R Mishra, T Asim
School of Computing & Engineering
University Of Huddersfield
Queensgate, Huddersfield, HD1 3DH, UK
m.alghadhi@hud.ac.uk

***Abstract*— Environmental degradation has come about for a number of factors including the use of fossil fuels in vehicles for everyday use. This paper attempts to understand the relationship between fuel consumption and various engine performance parameters under laboratory conditions in order to see how various factors contribute to the overall fuel consumption. The framework for testing has been decided as the New European Drive Cycle (NEDC) given its various testing advantages against other driving cycles. A test rig was applied to simulate the NEDC under laboratory conditions. The findings from this study provide information how vehicular fuel consumption varies with such driving parameters as vehicle speed, acceleration, and throttle position. They can be used to predict fuel consumption under any real life driving conditions, which will contribute to reducing fuel consumption in future vehicle design..** *(Abstract)*

***Index Terms*— NEDC, standard driving cycle, mathematical model, real life driving, testing**

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