

Driving Cycle for Motorcycle Using Micro-Simulation Model

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ABSTRACT

Driving cycle of vehicle has been used in emission estimation and fuel consumption study. Existing method of data collection using car chasing technique is expensive. The technique using micro simulation approach is cheaper and fast to derive the driving cycle. In this paper a traffic simulation model Driving Cycle Micro-Simulation Model for Motorcycle has been developed. The issue of lateral and longitudinal movement aspect in motorcycle driving has been examined in the model. Parameters to cover such movement have been built in the model and applied on a stretch in Edinburgh city of Scotland. Results from model have been both calibrated and validated. The results show that Driving Cycle Micro-Simulation Model for Motorcycle gives better representation of driving cycle and it can be used to understand the effect of driving modes on emission for better understanding of vehicular emission control.

KEYWORDS

Micro-Simulation; Driving Cycle; Vehicular Emission; Motorcycle

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