Development of Instrumented Motorcycle for Road Safety Study

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Abstract

Instrumented vehicles have a number of advantages over driving simulators for conducting research on driving behaviour. This paper presents an instrumented motorcycle designed to investigate real life driving behaviours of other vehicles. The instrumented motorcycle is equipped with a stand-alone data recorder with specialized software to record information. The accuracy test gathered was divided into three parts; speed, distance and angle test. The results show that the velocity measurement was more accurate and responds faster even in a small change of velocity.

Keywords: Instrumented motorcycle, Speed, distance, Angle, Measurement