

ABSTRACT

Currently the demand for vehicles is very important, and the increase in the number of purchases will be rising every year. Of the increase in the number of purchases each year, then the rising accident rate is also on the highway. Accidents caused by many factors, one of which is the performance of a motorcycle that is less supportive. Dynotest is an electro-mechanical machine that is used to measure the torque of the power produced by an engine. The main components of this tool is the rotary sensor, weight sensor, microcontroller 832, LCD, etc.

In this final project, designed and implemented dynotest portable to determine the performance of the motorcycle. The main components are used for the design of this portable dynotest is rotary sensors are used to detect the amount of rotation of the roller, weight sensors are used to detect the total weight of the rider and the motorcycle, microcontroller ATMEGA 328 which is used to input the code and formulas, ISM frequency module for data transmission wirelessly, seta LCD which informs the results of the test.

Results of measurements dynotest portable, will be compared with existing dynotest. The level of accuracy of $\pm 80\%$ of portable dynotest of existing dynotest.

Keywords: dynotest portable, dynotest existing, weight sensors, rotary sensors, microcontroller ATmega328, the LCD.