ABSTRACT

Non-conformance between the nominal amount stated on the fuel gauge pump and the volume of fuel released by the nozzle is a form of non-conformance that is unknown to consumers. This is done with various non-conformance whose aim is to reduce the amount of volume flowing from the volume that should be, so as to increase profits. To ensure non-conformance, a fuel gauge pump engine will be re-conducted. The measurement tolerance limit for the fuel measuring pump engine is allowed a maximum of ± 0.5%. Recalculation is done using a standard measuring vessel with manual working principles through measurement readings. So, we need a device that can measure the volume of fuel that works automatically.

This study aims to develop a monitoring system for measuring the volume of fuel filled in a vehicle tank. This device is equipped with a display that can display information in the form of the volume of fuel filled in the vehicle tank. Because this device is equipped with a level sensor and ultrasonic sensor that can measure the volume of fuel with a resolution of 20-40 mm and 3 mm, with a capacity of 15,072 ml. And can provide notification if the measured volume exceeds the tolerance limit of ± 0.5% of the volume that should be.

Keywords*: Non-conformance, BBM, Display, Recalibration, Level Sensor, Ultrasonic Sensor.*