

ABSTRACT

The train is one of the choices of transportation modes that have advantages in terms of cost efficiency. In order to improve services to the community, PT Kereta Api Indonesia (Persero) conducts railroad travel relations. Related to train travel, the safety factor is one of the things that must be considered.

Turnout motor is one of the devices that support train travel, complete maintenance must be ensured that the turnout motor is in proper condition for use. One of the parameters of the turnout motor in proper condition is its ability to move the tongue rail must be able to run properly. Therefore, the right instrument is needed to be able to measure the strength of the point motor in moving the load. Portable measuring devices can have more value because they can make it easier for officers to perform maintenance.

This digital device can be used as an option to support practicality and portable. With a digital system, components can be used simplicity because there is now a weight sensor (loadcell) and a microcontroller as a component for data processing and LCD as an output to display the measurement results.

As a measurement tool, we need an effective method to assess the measurement results can be ascertained. The use of linear regression method can be done in order to get the measurement results with a low error assessment value. Therefore an experiment is needed in sampling the measurement data.

Keywords : turnout motor, measuring instrument, portable, linear regression