

ABSTRACT

DESIGN OEE MEASUREMENT PROGRAM FOR CONVEYOR PROTOTYPE BASED ON IOT

Success is something that must be achieved by all Production Activities. However, in reality, there are several factors that can increase the awareness of a production. In the industrial world there are six major failures that occur in production activities. These six major failures are known as the Six Big Losses. OEE is a measurement method that aims to identify six major losses.

In this Final Project. A program that can measure the OEE value automatically on the Prototype Conveyor will be designed. The OEE value that has been obtained will be sent to the Android Application using the Antares IoT Cloud. The OEE value obtained by the Application can be stored on the Smartphone's internal storage.

Based on the tests that have been done, this OEE program takes 892 milliseconds to send from the PLC to the Android application. With details of the delivery time from the PLC to the Raspberry Pi for 290 milliseconds, the delivery time from the Raspberry Pi to Antares for 570 milliseconds, and the delivery time from Antares to the Android application for 32 milliseconds.

Keywords: *Overall Equipment Effectiveness (OEE), Android Application, Internet of Things (IoT).*