

ABSTRACT

The Covid-19 pandemic has resulted in employees working from the office at the company. Most of those who work from home are middle-level employees to top-level management who act as decision makers. So, we need a system to monitor and control remotely as a basis for decision making. One of the companies that founded is a bottled beverage company. The bottling plant simulator is a tool that demonstrates the bottle filling process to the micro-scale packaging process from the death production process. Statement Based on the foregoing, a real-time and remote monitoring and control system for the bottling plant is designed with a programmable logic controller (PLC). The design uses the waterfall method with the resulting quality either with regular or regular system development. In addition, the stages that are sequentially linear make the process easier to reach by the entire team involved. The results of this study are a system that can monitor and control the bottling plant simulator using an application on a smartphone in real-time with a delay of 0.55 seconds at the distribution box station and 0.548 seconds at the pick and place station.

Key word: Application, Controlling, Monitoring, PLC, Real-time, Simulator Bottling Plant