ABSTRACT

Today improvement of technology is growing rapidly. This matter proven by fast of growth of production process base on digitally. Even in everyday life, technology control have become important shares in life. So even also with industrial area also require control systems.

In laboratory control and power supply of Faculty of Electronics & Communications engineering in Institute Technology of Telkom is developing variant of control application. One of control application base on Programmable Logic Controller (PLC). To fulfill requirement of study in laboratory hence at this final project designed object identifier base of different of color using PLC.

The system specially designed to identify an object has tall blue, short blue, tall non blue, short non blue. The system consists of some main component such as PLC, conveyor, sensors, and actuators. System starts working identifying of color object that coming in conveyor. Then goods depends on color and height. For tall blue goods and non-blue short goods, system will put them on reject basket. For short blue and tall non blue goodl, will be dropped in second actuator

According to the result of examination and measurement got an output frequency of red color is 200 – 235 counter per second. For all system can recognice goods depend on color and height. For blue and height have have 70 % successful percentage rate, for short blue have 70 %, tall non-blue have 50% and short non blue also 50 %.