ABSTRACT

The mixer is a multi-purpose electro-mechanical device that is used as a mikser for food raw materials, certain substances, and various other types of raw materials. The use of this mixer certainly cannot be separated from the control system. However, at this time it is not yet automatic control. This causes the mixer user to need more time and energy when making dough in the kitchen.
The control system in this final project uses a control system with the PID (Proportional, Integral, Derivative) algorithm where this algorithm is used to simplify the system that runs on this tool. This tool has a sensor that can count the number of rounds produced by the mixer carried out by the Rotary Encoder sensor and can calculate the temperature of the ingredients calculated by the DS18B20 sensor, especially eggs where this tool is specifically designed to make egg beater automation tools for pastri dough. The results of this test can make it easier for the user because the automatic ON / OFF system of this tool when it has calculated the temperature before and during shaking with a temperature of <40 degrees and this tool can calculate the mixer rotation as much as 36,000 rounds automatically.

Kata Kunci: Mixer, Automation, Temprature Sensor, *Rotary Encoder*, Pastri, DS18B20, PID