

***Design and Implementation of an Automatic
Petis Stirring Machine Control System***

Ibu Salsa Liandra Putri, SKM., MKKK. (*Thesis Supervisor*)

Ardian Nur Fais

*Study Program of Mechatronic Engineering
Technology Majoring in Engineering*

ABSTRACT

The manual production process of petis kupang faces various challenges, such as inconsistent results, excessive labor usage, and inefficiencies in time and cost. To address these issues, this research designs and implements an automatic control system for a petis stirring machine using a Timer and REX-C100 temperature sensor. The system aims to maintain the cooking temperature at a set point of 70 degrees Celsius and regulate the stirring duration for 4 hours automatically. The REX-C100 temperature sensor functions as a temperature controller connected to the heating element, while the Timer is used to set periodic stirring cycles. Implementation results show that the system can maintain a stable temperature according to the set point and automatically control the stirring process, thereby improving production consistency, saving energy, and reducing the need for manual labor. Thus, this design successfully enhances time efficiency, operational costs, and product quality in the production of petis kupang.

Keywords: *Control system, stirring machine, temperature sensor.*