**PROCESSING MACHINE, REFRIGERATOR AND MILK PACKAGING** **SYSTEM WITH 3-IN-1 INTEGRATED PROCESS**

Yan Dwi Pratama1), Nikes Sari Kiss Arimbi1), Fajar Septiawan Dwi Anggoro1), Aisyah Nur Khalifah1), Muhammad Sefriza Toriq Hidayat1), Agung Prijo Budijono, S.T., M.T\*)1

*1Surabaya State University*

*yanpratama@mhs.unesa.ac.id*

*nikenarimbi@mhs.unesa.ac.id*

*muhammad.17050423008@mhs.unesa.ac.id*

*fajar.17050754017@mhs.unesa.ac.id*

*aisyah.17050754014@mhs.unesa.ac.id*

*agungbudijono @unesa.ac.id**\*(correspondence author)*

**ABSTRACT**

***The purpose*** *The purpose of this study is to provide solutions to problems that exist in SMEs Cow Milk Momoo, especially the problem of production processes that the process is still using the traditional way and the tool is still relatively simple.*

***Method*** *The method used is to utilize Temperature Controller on Processing Machine, cooling, and packing Cow Milk that serves to regulate the cooking temperature so that the heat generated can be more evenly distributed. Processing, refrigeration and packing machines Cow Milk is also equipped with a Wiper Motor instead of stirring which is still manual so that the stirring process can run automatically. In addition to this machine also uses Heat Exchangers technology soaked in water so as to be able to overcome the problem of cooling process is still simple.*

***Results*** *The expected result is the increased productivity and efficiency of the production process so that the productivity of SMEs of Cow Milk Momoo can increase 2-fold which initially yields an average of 150 liters of Cow Milk / day can produce up to 300 liters of Cow Milk / day.*

***The Findings*** *The findings of this research are the use of Temperature Controller, Wiper Motor, and Heat Exchanger as solution of SMEs Cow Milk Production Process Problem.*

***Keywords****: Cow Milk, , SMEs, Temperature Controller, Heat Exchanger,Wiper Motor*