

## ABSTRACT

*Coconut (Cocos Nucifera L) is one of Indonesia's potential agricultural products. Almost all parts of the plant can be used. Therefore a coconut epidermis peeling machine was designed by (Pratama, 2021), with a top grip design consisting of an Air Cylinder, Shaft Top Grip, and Top Grip Head Pin. However, with this design the Top Grip is less stable in gripping the coconut, which causes the process of peeling coconut epidermis are less clean. This research was carried out so the epidermis peeling machine becomes more stable in frippung the coconut during peeling process begin and produce a cleaner peel than before.*

*In this design of the top grip supported by Pneumatic Cylinder system in the coconut epidermis peeling machine which designed using the Reverse Engineering method, the steps taken in this research is do a field study by directly observing the work process on the research project to obtain problems with the existing machine, than collecting data as a basis for solving the problems to make this research become more effective. After the data is collected, an investigation was carried out on the machine working process and do the product decomposition so that the specification for each part are obtained to designed the proposed product, then tests the design.*

*The test results showed that the top grip was more stable by changing the specifications of the Air Cylinder and cutting the top grip Shaft. The top grip also have more grips to the coconut by adding a pin to the top head grip, so that the coconut epidermis peeling machine produced a cleaner peel than before.*

***Key words – Coconut Epidermis Peeling Machine, Upper Gripper, Pneumatic Cylinder, Reverse Engineering.***