

ABSTRACT

Coconut is a plant that is important to meet the needs of human life. One part of the coconut that can be used is the coconut fruit and coconut husk. Therefore a coconut husk peeler was designed by (Pratama, 2021) with a gripper design having a chuck pin height of 2.5 cm and a drive motor speed of 186 rpm, but with the gripper design and the speed of the drive motor, the gripper seat cannot grip the coconut properly good.

The chuck mount was designed using the reverse engineering method chosen because it took into account the design conditions of the existing chuck mount. Tests were carried out by varying the design of the clamp mount and the speed of the existing motor with the design of the clamp mount and the speed of the traveling motor. The software used is Autodesk Inventor and Solidworks to redesign the clamp holder.

The test results show that the peeling of the coconut husk from the tourist clamp holder design is better than the existing clamp holder design. This can be seen from the weight of the coconut husk from stripping the design of the excursion gripper holder which is lighter and the level of cleanliness of the coconut fruit is better than the result of stripping the coconut husk from the design of the eksiting holder holder. In addition, the rotation of the driving motor trying to mount the clamp with a motor speed of 93 rpm is more stable than the rotation of the existing clamp holder.

The height of the clamp holder pin and the speed of the driving motor affect the results of stripping the coconut husk. Improvements made were to increase the height of the clamp mount pin and reduce the rpm of the motor. The advantage that can be felt is the result of better peeling of the coconut husk.

Keywords: Coconut husk, Clamp holder, Motor speed, Reverse Engineering.