

# **DESIGN AND BUILD A SCALLOP WASHING TOOL WITH AC MOTOR**

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## **ABSTRACT**

*This shellfish is a food that is very high in protein, amino acids, omega 3 fatty acids and other. Shells are very much traded for dishes from restaurants, restaurants, beachside attractions, hotels and weddings. But these shells are marine products that are very dirty because of mud, therefore to process these shells must use the right way so that these shells are clean. So a modern conch shell washing device was made using a machine, so that the clam shell washing process was efficient. An electric current flows through the AC regulator as an input to change the voltage, then from the AC regulator the induction motor speed regulator with a low to high speed, the desired limit and this motor works as a driver for the shells washer. The difference in motor speed when the speed of the selector 2 with a load of 1 KG and selector 3 with a load of 2 KG, obtained the power of each with the value of the analysis. The position of the 2 power selector obtained is 112.17 watts. The position of the 3 power selector obtained is 178.44 watts. From testing the work of the tool using time, energy and cost, from testing the time of 1.5 minutes the energy produced is 0.0028 KWH and the cost used during sales is Rp. 4.04 for a washing time of 1.5 minutes, for a 3-minute time test, 0.148 KWH energy was obtained and the cost during washing was Rp. 273.81 for 3 minutes of washing.*

**Keywords:** AC regulator, induction motor.