

**1 PHASE MOTOR CONTROL SYSTEM ON AUTOMATIC
DUCK EGG CLEANING EQUIPMENT.** Mochamad Irwan Nari,
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ABSTRACT

Ducks are poultry that produce eggs and meat that are beneficial for the food needs of the community. Because ducks often lay eggs in any place, duck eggs are susceptible to bacterial contamination and require cleaning before processing. In the cleaning stage that uses a traditional process, it will take a lot off time and risk damaging about the eggs. This study aims to be able to design an automatic duck egg cleaning device with 1 phase motor control, evaluate the performance of the motor in the cleaning process and measure the influence of motor RPM on the level of egg cleanliness in UD. Salted Eggs Jaya Jember. The method used in the thesis is the experimental, with testing 1 phase motors using a dimmer as a motor voltage regulator. Automatic duck egg cleaning tools are successfully made and can be used properly. The results of the tests carried out showed that the speed level on the motor and the time span at the time of cleaning greatly affected the level of egg cleanliness, namely the highest value with a time span of 30 seconds at the speed of 2671 and 2688 RPM producing 4 duck eggs and in the time span of 1 minute at turns 2654 and 2644 producing 5 clean eggs.

Kata Kunci : *Duck Eggs, Motor 1 Phase , RPM*