

DESIGN AND BUILDING OF A PEANUT GRILLING MACHINE USING A 1 PHASA AC MOTOR

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ABSTRACT

Pecel seasoning is made from peanuts, the condition of the wet pecel seasoning is only usually used to be served directly to pecel. To overcome this problem, many people make pecel seasoning from the wet process and dry process, but after the peanut and pecel grinding machine is made which is equipped with a motor and a peanut container, it is hoped that the process of making peanut grinding can be done directly and quickly without have to do the grinding bit by bit. The design of a grinding machine with this motor system begins with the calculation of the pulley transmission. which is driven by a 1-phase electric motor, while the planning of machine parts includes pulleys, belting, motors, LCD, push buttons. The results obtained from the calculations are: the rotational speed of the motor and pulley or V-belt using the V-Belt type A56, the motor power using a 1-phase electric motor of 2800 Rpm, the capacity of the peanut test results = 1 kg / hour. Data collection on peanut grinding was carried out using the 2x 500 Gr method of grinding peanuts with 2 filters of different types of dimensions, namely 5 mm and 10 mm, it took time to grind peanuts for dimensions of 5 mm for 7 minutes and dimensions of 10 mm for 5 minutes. With a percentage of the total ground peanut yield is 60%.

Keywords: peanuts, push button, grinding machine, single phase motor, v-belt.