

ABSTRACT

Drying process becomes one of the important process in making tempe where in this process the temperature is lowered to reach the technical requirement. This temperature decrease works so that the fungus can grow dan not make it rotten. The tools used for drying in the company CV. N.J This food is a perforated drum. The perforated drum is a large container made of plastic that is hollowed all over the surface. More time is needed ie 94 minutes to 65 kg, because it only relies on the ambient temperature to lower soybean seed temperature. While the time available for the drying process is only 47 minutes. This situation will affect the quality of tempe produced, because if the temperature of soybean seeds is not in accordance with technical provisions, the fungus in tempe can not grow optimally so that the resulting tempe is classified as "young". So do a redesign machine or repair of the machine used. The method that will be used for the redesign of this machine is Otto and Wood's Reverse Engineering dan Redesign. The design result of soybean dryer machine has been achieved by making additional rotary feature so as to produce soybean seeds in accordance with the technical provisions with a faster time of 20 minutes to 65 kg. This new feature is developed to produce the concept of drying machine with rotation drying mechanism. With a total length of 1570 mm engine, 810 mm engine width, dan 107.5 mm height.

Keywords: *Tempe, Reverse Engineering, The Term Set, Drying Machine, Otto and Wood.*