BUILT AND DESIGN THRESER PADDY

Name : 1. FERDY H.  
2. PUTRA DWI N.  
NRP : 1. 2109 039 028  
2. 2109 039 029  
Department : D3 Teknik Mesin FTI-ITS  
Counsellor Lecturer : Ir. Mahirul Mursyid, M.Sc  
Counsellor Instructor : M. Jazuli, S.Pd.

Abstract

Rice harvest activities in East Java, especially in Sidoarjo, Tanggulangin majority still done by traditional method, because the limited equipment and agricultural machinery which not adequate yet. That circumstances causing some losses during the process of threshing rice, mixing of the chaff with the grain, and it takes a long time process and needs many operator which makes the high operational costs. To overcome this case, we invent a thresher machine which expected to improve product, accelerate the process, and to avoid the mixing of chaff and grain in the product.

The design of the machine is done by combining with the blower suction paddy husk. The process in generally, when the paddy fill in, it’ll get the force by thr threser cylinder, and then the straw will come out through the output, grain will come down, and chaff will be sucked by the blower.

In the operation, this thresher machine needs force as mount 450 N with 575 rpm shaft rotary, and 1,2 N for the blower’s force. And so that, this thresher machine needs power as mount 6,348 HP to produce 705,6 kg/h grains.

Key word : paddy thresher, agriculture equipment, rice, separator, blower.