

ANALISA RANCANGAN MESIN PRONTOK JAGUNG TERHADAP PUTARAN DAN LAJU PRODUKSI

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ABSTRAK

Penelitian tugas akhir yang berjudul “Analisa Rancangan Mesin Perontok Jagung Terhadap Putaran Dan Laju Produksi” Dari hasil analisa dan rancangan alat ini didapatkan daya penggerak 3,5 PK dan putaran mesin 4000 rpm. Komponen utama terdiri dari kerangka yang terbuat dari besi siku-siku ukuran 50 x 50 x0,5 mm, drum, poros, bearing, Hasil perhitungan diperoleh Gaya untuk melepas butiran jagung 38 kg yang tedapat pada rantai, diameter poros 3 cm dengan jenis bahan JIS G 4501 tipe S55C, putaran poros 600 rpm. Produksi proses perontok jagung sebesar 412 kg/jam. Hasil dari rancangan, alat perontok jagung sesuai dengan kebutuhan petani jagung dalam mengatasi masalah alat perontok jagung. Alat ini mudah digunakan, efesiansi, mudah diperbaiki jika terjadi kerusakan dan bahan-bahan yang digunakan semuanya ada dipasaran lokal.

Kata kunci : *Laju produksi jagung, Daya, Putaran*

Keterangan:

1. Penulis
2. Pembimbing I
3. Pembimbing II

AN ANALYSIS OF CORN THRESHING MACHINE DESIGN TOWARDS THE ROTATION AND THE RATE OF PRODUCTION

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ABSTRACT

This thesis titled "An Analysis of Corn Threshing Machine Design Towards The Rotation And The Rate of Production " From the analysis and design of the tool is obtained locomotion 3.5 PK and the engine turns 4000 rpm. The main components consist of a framework terbut of iron bracket size 50 x 50 x 0,5 mm, drums, shafts, bearings, calculation results obtained Style to remove 38 kg maize grain which is attached to the chain, shaft diameter of 3 cm with the type of material JIS G 4501 S55C type, shaft speed of 600 rpm. The production of corn thresher process of 412 kg / hour. Results of the draft, corn thresher tool in accordance with the needs of corn growers in troubleshooting tool corn thresher. This tool is easy to use, efficiency, easily repaired if damage occurs and the materials used in the market are all local.

Keywords: maize production rate, Power, Round

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