

RANCANG BANGUN MESIN PEMISAH KULIT ARI KACANG TANAH

Nama : Dian Pratama Yuda

NIM : 2103230032

Dosen Pembimbing : 1. Rahmat Fajrul, S.T., M.T.

2. Irwan Kurniawan, S.T., M.T.

ABSTRAK

Proses pemisahan kulit ari pada kacang tanah merupakan tahapan penting dalam pengolahan pascapanen, khususnya bagi pelaku Usaha Mikro, Kecil, dan Menengah (UMKM) yang bergerak di bidang makanan olahan. Di Kecamatan Bangko, Kabupaten Rokan Hilir, Provinsi Riau, proses ini umumnya masih dilakukan secara manual, sehingga kurang efisien, memerlukan waktu yang lama, dan berdampak pada kualitas serta higienitas produk.

Metode yang digunakan meliputi proses identifikasi kebutuhan, desain mekanik, pemilihan bahan, perakitan, serta pengujian kinerja mesin. Mesin dirancang menggunakan sistem gesekan silinder berputar yang digerakkan oleh motor berdaya rendah agar hemat energi dan mudah dioperasikan.

Kata Kunci: Mesin Pemisah, Kulit Ari, Kacang Tanah, UMKM, Rancang Bangun, Kecamatan Bangko.

DESIGN AND CONSTRUCTION OF A MACHINE FOR SEPARATION OF PEANUT SHELL

Name : Dian Pratama Yuda
Student Number : 2103230032
Supervisor : 1. Rahmat Fajrul, S.T., M.T.
2. Irwan Kurniawan, S.T., M.T.

ABSTRACT

The process of removing the skin (seed coat) from peanuts is an essential stage in post-harvest handling, especially for Micro, Small, and Medium Enterprises (MSMEs) engaged in food processing. In Bangko District, Rokan Hilir Regency, Riau Province, this process is still commonly done manually, resulting in inefficiency, longer processing time, and compromised product quality and hygiene. To address this issue, this study aims to design and develop a simple and efficient peanut skin removal machine tailored to the production needs of local MSMEs.

The design process includes identifying user needs, mechanical design, material selection, assembly, and performance testing. The machine utilizes a rotating cylinder friction system powered by a low-power motor to ensure energy efficiency and ease of operation.

Keywords Peeling Machine, Peanut Skin, Peanut, MSME, Design and Development, Bangko District..