

**PEMBUATAN RANCANGAN ALAT BANTU PENGELOMPOK *NUT*
BERDASARKAN UKURAN DIAMETER UNTUK 'ANALISIS
HISTOGRAM 1000 *NUT* DAN *KERNEL*' DI PT BRAHMA
BINABAKTI MILL, MUARO JAMBI, JAMBI**

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Abstrak

Kegiatan magang dilaksanakan selama 3 bulan dari tanggal 14 Januari 2019 sampai dengan 10 April 2019 di PT Brahma Binabakti Mill. PT Brahma Binabakti Mill merupakan pabrik pengolahan kelapa sawit yang berdiri pada tanggal 9 November 1998 dengan kapasitas olah kelapa sawit sebesar 60–65 ton/jam. Produk utama PT Brahma Binabakti Mill berupa *Crude Palm Oil* (CPO) dan *Palm Kernel* (PK). Selama magang ditempatkan pada divisi pengelompokan (*grading*), proses, laboratorium, pemeliharaan (*maintenance*), serta umum dan kantor. Divisi pengelompokan bertugas memastikan kualitas bahan baku yang diterima pabrik sesuai standar. Divisi proses bertanggung jawab pada pengolahan yang harus sesuai dengan *Standard Operation Procedure* (SOP). Divisi laboratorium melakukan pengendalian mutu dan divisi pemeliharaan melakukan utilisasi yang optimal guna mendukung operasional pabrik. Divisi umum dan kantor bertanggung jawab pada urusan umum perusahaan. Salah satu permasalahan di PT Brahma Binabakti Mill pada proses analisis histogram 1000 *nut* dan *kernel* karena pengelompokan *nut* berdasarkan diameter dilakukan secara manual sehingga menghabiskan banyak waktu, hasil analisis kurang akurat, menambah biaya lembur karyawan, dan kurang efisien. Sehingga tujuan dari kegiatan magang mahasiswa adalah untuk merancang alat pengelompok *nut* berdasarkan diameter guna membantu pada proses analisis 1000 *nut* dan *kernel* di PT Brahma Binabakti Mill. Alat pengelompok *nut* berdasarkan diameter diharapkan dapat mempersingkat waktu analisis histogram 1000 *nut* dan *kernel*, menekan biaya lembur karyawan, dan hasil analisis lebih akurat dengan prosedur yang lebih efektif dan efisien.

Kata Kunci: efisiensi, kelapa sawit, *nut*

**TIME EFFICIENCY IMPROVEMENT WITH NUT GROUPING TOOL
BASED ON DIAMETER SIZE IN '1000 NUTS AND KERNELS
HISTOGRAM ANALYSIS' AT PT BRAHMA BINABAKTI MILL**

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Abstract

The internship activities were held for 3 months from January 14, 2019 until April 10, 2019 at PT Brahma Binabakti Mill. PT Brahma Binabakti Mill is an oil palm industry which was established on November 9, 1998 with its oil palm capacity of 60-65 tons / hour. The main products of PT Brahma Binabakti Mill are Crude Palm Oil (CPO) and Palm Kernel (PK). During the internship, the interns were placed in the grading, process, laboratory, maintenance, general and office divisions. Grading division is responsible to ensure the quality of raw materials received by the factory based on standards. The process division is responsible for processing which must be in accordance with the Standard Operation Procedure (SOP). The laboratory division carries out quality control and the maintenance division performs optimal utilization to support plant operations. In addition, the general division and office are responsible for the general affairs of the company. One of the problems in PT Brahma Binabakti Mill is in the process of histogram analysis in 1000 nuts and kernels because the grouping of nuts based on diameter is done manually so that it takes a lot of time, less accurate, increase overtime costs for employees, and are less efficient. Therefore, the purpose of the intership is to design a grouping nut tool based on diameter to improve the 1000 nut and kernel analysis efficiency at PT Brahma Binabakti Mill. The group nut tool based on diameter is expected to shorten the time of 1000 nut and kernel histogram analysis, reduce the cost of employee overtime, and the results of analysis are more accurate with the more effective and efficient procedures.

Keywords: efficiency, nut, palm oil