

## STUDI PRODUKTIVITAS MESIN DAN ANALISIS BIAYA USAHA MESIN

(Studi Kasus Di Pabrik Papan Sambung PT Mitra Kayu Sejati, Babadan,  
Purwomartani, Kalasan, Sleman, Yogyakarta)

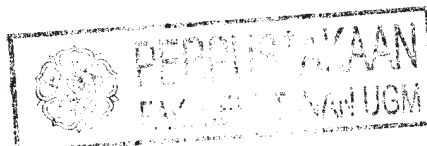
### INTISARI

Penelitian ini dilakukan di pabrik papan sambung PT Mitra Kayu Sejati, Babadan, Purwomartani, Kalasan, Sleman, Yogyakarta. Tujuan penelitian adalah untuk mengetahui produktivitas mesin yang digunakan; mengetahui biaya usaha mesin dan mengetahui besarnya biaya total rata-rata setiap satuan kegiatan.

Metode yang digunakan adalah pengukuran prestasi kerja dan analisis biaya usaha mesin. Data konsumsi waktu kerja diperoleh melalui time study yang selanjutnya dilakukan perhitungan untuk mendapatkan hasil produktivitas mesin. Analisis biaya usaha mesin dilakukan melalui perhitungan terhadap komponen penyusun biaya tetap dan biaya variable. Biaya total rata-rata dihitung dengan membagi biaya usaha mesin dengan produktivitas mesinnya. Survey institusional dilakukan untuk mendapatkan data sekunder yang berhubungan dengan penelitian ini dan data pendukung lainnya yang relevan.

Berdasarkan hasil penelitian, besarnya produktivitas mesin *band saw* 5,545 m<sup>3</sup>/jam; *ripsaw* 5,643 m<sup>3</sup>/jam; *cross cut* 5,107 m<sup>3</sup>/jam; *press* 1,965 m<sup>3</sup>/jam; *zesing* 6,083 m<sup>3</sup>/jam; dan *sanding* 2,996 m<sup>3</sup>/jam. Hasil produktivitas tersebut belum termasuk konsumsi waktu untuk kegiatan persiapan. Hasil perhitungan biaya usaha mesin menunjukkan besarnya biaya usaha mesin *band saw* adalah Rp. 1.599.750/jam; *ripsaw* Rp. 233.300/jam; *cross cut* dan *press* masing-masing Rp. 40.000/jam; *zesing* Rp. 13.300/jam; dan *sanding* Rp. 100.000/jam. Dengan memperhitungkan rendemen masing-masing mesin, didapatkan besarnya biaya total rata-rata per sortimen untuk *band saw* adalah sebesar Rp. 54.950/ m<sup>3</sup>; *ripsaw* Rp. 7.900/ m<sup>3</sup>; *cross cut* Rp. 1.550/ m<sup>3</sup>; *press* Rp. 2.900/ m<sup>3</sup>; *zesing* Rp. 350/m<sup>3</sup>; dan *sanding* Rp 7.450/ m<sup>3</sup>. Sehingga keseluruhan biaya total rata-rata persortimen adalah sebesar Rp. 75.100/ m<sup>3</sup>.

Kata Kunci: Papan Sambung, Produktivitas, Biaya Usaha Mesin, Biaya Total Rata-rata.



## STUDY OF MACHINE PRODUCTIVITY AND ANALYSIS OF MACHINE RATE

(Case Study in Laminating Wood Factory, PT Mitra Kayu Sejati, Babadan,  
Purwomartani, Kalasan, Sleman, Yogyakarta)

### ABSTRACT

The research was carried out in Laminating wood factory of PT Mitra Kayu Sejati, Babadan, Purwomartani, Kalasan, Sleman, Yogyakarta. The aims of the research are to observe the productivity machine; to know the machine rate as well as the total average cost in each activity.

Time study and analysis machine rate used in this research. Field observation to collect time consumption in each activity and then was used as a base to calculate machine productivity. Machine rate analysis carried out by calculating the components of the fix and variable cost. Total average cost was calculated by comparing machine rate to the machine productivity. Institutional survey was done to collect secondary data and other relevant supporting data.

Based on the research result, the productivity of band saw was 5,545 m<sup>3</sup>/jam; rip saw was 5,643 m<sup>3</sup>/jam; cross cut was 5,107 m<sup>3</sup>/jam; press was 1,965 m<sup>3</sup>/jam; zesting was 6,083 m<sup>3</sup>/jam; and sanding was 2,996 m<sup>3</sup>/jam. The productivity done without calculating the time consumption of preparation activities. The machine rate result shows that band saw costs Rp. 1.599.750/jam; rip saw costs Rp. 233.300/jam; cross cut and press costs Rp. 40.000/jam; zesting costs Rp. 13.300/jam; and sanding costs Rp. 100.000/jam. Regarding to the recovery rate of each machine, known that total average cost for band saw was Rp. 54.950/ m<sup>3</sup>; rip saw was Rp. 7.900/ m<sup>3</sup>; cross cut was Rp. 1.550/ m<sup>3</sup>; press was Rp. 2.900/ m<sup>3</sup>; zesting was Rp. 350/m<sup>3</sup>; and sanding was Rp. 7.450/ m<sup>3</sup>. So that the total average processing cost was Rp. 75.100/ m<sup>3</sup>.

Key word: Laminating Wood, Productivity, Machine Rate, Total Average Cost.

