ANALISIS EFEKTIVITAS KINERJA MESIN PRINTING SM-52 UNTUK PRODUK BUKU TAHUNAN Studi Kasus : CV RENJANA OFFSET

Dwi Dasa Candra[1], Ir. Widya Setiafindari, S.T., M.Sc.[2]
Fakultas Sains & Teknologi, Program Studi Teknik Industri, Universitas Teknologi Yogyakarta
Jl. Glagahsari No 63, Umbulharjo, Yogyakarta 55164
[1]dcdwik73@gmail.com, [2]widyasetia@uty.ac.id

ABSTRAK

CV Renjana Offset merupakan perusahaan yang bergerak dalam bidang percetakan dengan menggunakan metode percetakan *offset*. Kebanyakan pesanan masuk di CV Renjana Offset adalah buku tahunan sehingga mesin cetak SM 52 ini merupakan mesin utama pada percetakam *offset*. Meskipun mesin SM 52 sudah melakukan *service* setiap bulannya tetapi, mesin SM 52 masih mengalami kerusakan (*Breakdown*) pada saat jam kerja dan pada akhirnya akan menyebabkan kerugian waktu (*Downtime*).Tercatat selama kurun waktu bulan Juni 2022 s/d November 2022 telah terjadi 10 kali *breakdown* dengan total waktu 17,5 jam *downtime* pada mesin SM 52. Tujuan penelitian ini adalah untuk mengetahui efektivitas kinerja mesin SM 52. Salah satu metode pengukuran kinerja dan efektivitas mesin yang digunakan adalah *Overall Equipment Effectiveness*. Selanjutnya, untuk mencari penyebab tidak efektif dari mesin tersebut dengan menggunakan perhitungan *Six Big Losses* untuk mengetahui faktor apa saja yang paling dominan. Kedua metode ini merupakan alat ukur keberhasilan penerapan *Total Productive Maintenance*. Hasil perhitungan nilai rata-rata *performance rate Overall Equipment Effectiveness* mesin SM 52 bulan Juni 2022 s/d November 2022 sebesar 94,53%. Nilai tersebut masih di bawah standar *world class* OEE pada *performance rate* yaitu 95%. *Losses* terbesar adalah *Set Up And Adjustment Losses* yaitu sebesar 30% dengan total waktu 7740 menit selama bulan Juni 2022 s/d November 2022.

Kata Kunci : *Breakdown, Downtime, Total Productive Maintenance*, *Overall Equipment Effectiveness*, *Six Big Losses*

PERFORMANCE EFFECTIVENESS ANALYSIS OF SM-52 PRINTING MACHINE FOR YEARBOOK PRODUCTS
Case Study: CV RENJANA OFFSET

ABSTRACT

CV Renjana Offset is a printing company that uses the offset printing technology. Because yearbooks account for the majority of incoming orders at CV Renjana Offset, this SM 52 printing machine serves as the primary offset printing equipment. Despite being serviced once a month, the SM 52 machine nevertheless sustains damage (Breakdown) during working hours, resulting in a loss of time (Downtime). From June 2022 to November 2022, the SM 52 machine experienced 10 problems, resulting in a total of 17.5 hours of downtime. The goal of this research is to investigate the efficacy of SM 52 machine performance. Overall Equipment Effectiveness is one approach of measuring equipment performance and effectiveness. Furthermore, utilize the Six Big Losses formula to determine which aspects are the most prevalent in determining the source of the machine's ineffectiveness. Both of these strategies are tools for measuring the success of Total Productive Maintenance adoption. The average performance rate of Overall Equipment Effectiveness of SM 52 machines from June 2022 to November 2022 was calculated to be 94.53%. At a performance rate of 95%, this figure is still below the world class OEE level. Set Up And Adjustment Losses are the most costly, accounting for 30% of total time spent from June 2022 to November 2022.

Keywords: Breakdown, Downtime, Total Productive Maintenance, Overall Equipment Effectiveness, Six Big Losses

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