

Analisis Kebijakan Perawatan dan Penentuan jumlah Persediaan Suku Cadang Roll Karet Yang Optimal Pada Mesin Cetak Goss Community

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ABSTRAK

PT. Masscom Graphy Semarang merupakan perusahaan percetakan dan penerbitan. Pada awal berdirinya PT. Masscom Graphy hanya mencetak Harian Suara Merdeka, tetapi kemudian berkembang pada pekerjaan lain, antara lain Cetak Surat Kabar, Cetakan Tabloid, Cetakan Majalah, Cetakan Umum, Cetakan Buku yang diproduksi melalui mesin-mesin Goss Urbanite, Goss Community, Manugraf. Penelitian ini mendeskripsikan pemilihan kebijakan repair dan preventive maintenance untuk mesin cetak Goss Community pada komponen Roll Karet dan penentuan jumlah persediaan suku cadang Roll Karet yang optimal, dimana pada komponen ini frekuensi kerusakan tinggi. Berdasarkan hal tersebut perlu dilakukan suatu penelitian untuk memilih kebijakan repair dan preventive maintenance yang efektif dan efisien dengan mempertimbangkan faktor biaya, frekuensi breakdown dan waktu downtime. Tahapan yang digunakan dalam penyelesaian masalah dengan menentukan distribusi frekuensi breakdown, menghitung biaya kebijakan perawatan, memilih alternatif kebijakan berdasarkan besarnya biaya perawatan untuk komponen Roll Karet. Dari hasil pengolahan dan analisa data, diperoleh alternatif kebijakan repair dan preventive maintenance sebagai alternatif yang dapat menurunkan biaya perawatan dan frekuensi breakdown. Dari hasil perhitungan pada pengolahan data diperoleh hasil Repair sebesar Rp. 6.538.461,25. Sedangkan hasil Preventive Maintenance dengan periode $n = 4$ sekali sebesar Rp. 5.089.969,593. Dapat dilihat bahwa biaya Preventive Maintenance lebih kecil dibandingkan dengan Repair. Sehingga kebijakan Preventive Maintenance merupakan kebijakan yang sebaiknya digunakan oleh perusahaan. Sedangkan untuk pengendalian persediaan yang optimal didasarkan interval waktu penggantian konstan untuk Preventive Maintenance komponen Roll Karet diperoleh dengan lead time 2 minggu, jumlah pemesanan minimum 3 unit, frekuensi pemesanan 9 kali, waktu interval pemesanan 40 hari, pemesanan kembali 3 unit, dengan total biaya minimum Rp.48.292.420.

Kata Kunci : PT. Masscom Graphy, Preventive Maintenance Policy, Repair Policy, Breakdown, Persediaan Suku Cadang Yang Optimal.

Analysis of the policy of care and the determination of Inventory spare parts Rubber Roll Optimal printing press Goss Community

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ABSTRACT

PT. Masscom Graphy Semarang is a printing and publishing company. At the beginning of the establishment of PT. Masscom Graphy scored only Daily Independent Voice, but then developed on other work, including Print newspapers, Tabloid Magazine Prints, Prints, prints, prints General books produced through machines Goss Urbanite, Goss Community, Manugraf. This study describes the selection policy of repair and preventive maintenance for the printing press Goss Community on the component Roll rubber and the determination of the amount of inventory spare parts Rubber Roll that is optimal, which at this frequency component damage is high. These things need to be done on the basis of a research policy for selecting repair and preventive maintenance of effective and efficient taking into account the cost factor, the frequency of breakdown and time of downtime. The stages were used in the settlement of the problem by determining the frequency distribution breakdown, calculate the cost of care policy, choose alternatif policies based on the magnitude of the costs of care for Rubber Roll component. From the results of the processing and analysis of data, obtained an alternative policy of repair and preventive maintenance as an alternative that can lower the cost of care and the frequency of breakdown. From the results of the calculations on the data processing results obtained Repair amounting to Rp. 6,538,461.25. While the results of the Preventive Maintenance with a period of $n = 4$ once amounted to Rp. 5,089,969.593. It can be seen that the cost of Preventive Maintenance is smaller compared with the Repair. So the policy of Preventive Maintenance is a policy that should be used by the company. As for the optimal inventory control based constant replacement intervals for Preventive Maintenance of components Roll Rubber obtained with a lead time of 2 weeks, the minimum number of bookings 3 units, frequency reservation 9 times, the time interval is 40 days, booking reservations back 3 units, with a total minimum fee of Rp. 48.292.420.

Keyword : PT. Masscom Graphy, Preventive Maintenance Policy, Repair Policy, Breakdown, Optimal Spare Parts Inventory.