

## **ABSTRACT**

*Percetakan industry in Indonesia grew rapidly affecting the Indonesian economy. PT ABC is one of the companies in the field of printing industry in Indonesia, established in 1970. PT ABC to produce books about the National Exam school and elementary, middle, and high school, children's books, mail election, and others. Printing process at PT ABC there are several processes, ie precast, printing, and finishing. Printing process is a process that the most important because at this stage of the printing process and contents cover performed by two different types of machines, the type of web printing and sheet printing. For this type of web printing of six pieces have advantages over print types pelipatnya sheet because it has its own engine.*

*Based on productivity data types of web printing, machine Manugraph have the greatest productivity so in other words Manugraph machine has the most important role in the production process. If the machine is damaged, it will cause delays in the production process so it should have a proper preventive maintenance. Based on the results of the determination of the critical subsystems, was selected as the printing subsystem critical systems that need to be determined maintenance policy appropriate to the characteristics of damage using the method of Reliability-Centered Maintenance II as well as the consequences and risks caused by damage by using Risk Based Maintenance.*

*The results of data processing using RCM method, the result for ten scheduled on-condition task, eleven scheduled discard task, and four scheduled restoration task. Maintenance intervals each of the components vary according to the task obtained. And the results obtained from the method RBM system performance loss amounted to Rp 6.486.742.077 and Rp 5.643.765.482 risk. The total cost of the proposed treatment is obtained by optimal time interval that is equal to Rp 6.478.302.684.*

*Keywords: Preventive Maintenance, Reliability Centered Maintenance, Risk Based Maintenance.*