ABSTRACT

PT XYZ is one of the printing industry company in Indonesia since 1970. The products that produced by the company are school books (elementary, middle, and high school), national question sheet, General Election ballot paper, and other products that related to the printing industry. PT XYZ has 27 machines, that divided into four divisions, there are preprints, printing, finishing, and packaging. At this research is focused on the printing machine named Mitsubishi 1F-15000 Machine, because it has high downtime and damage frequencies thus affects the production process. Therefore, PT XYZ requires an effective maintenance policy for Mitsubishi 1F-15000 and intervals taking into account the maintenance cost and the characteristics of the machine to minimize downtime damage.

This research use Reliability Centered Maintenance (RCM II) methods to conduct quantitative and qualitative analysis. Test to parameters TTF and TTR, calculation MTTF / MTBF and MTTR are quantitative analysis. Then Qualitative analysis is to create RCM II Information Worksheet and RCM II Decision Worksheet in order to determine appropriate preventive maintenance and maintenance intervals are appropriate based on the reliability of each component.

Based on the method of RCM II, output will be generated for this study was the determination of critical systems, task selection for each component, interval maintenance activities, and maintenance cost. Task selection for machine components has 3 types such as schedule on condition task, schedule restoration task, and schedule discard task with maintenance costs Rp 598.406.736.

Keywords: *Reliability, Reliability Centered Maintenance* (RCM II), *Preventive Maintenance*