

ABSTRACT

Paving machine is a machine that used for make a paving continuously in easy way. The XYZ company had a problem with paving machine during its production process. The problem is based on company database, shows that the production process target wasn't reached due to a problem in paving machine occurred. This problem caused by the ability of paving machine. That's why a routine maintenance is required for keeping the machine running well. So that the machine can be used continuously as well as it has to be, and the performance of the machine can be guaranteed. Analysis method that will be used in this research is around maintenance schedule, maintenance time interval, and cost production reduction, wich the method is Reliability and Risk Centered Maintenance (RRCM). In order to determine machine's critical component, Risk Matrix will be done and there will be 3 component choosen which is pillow block, steel molding, and chain. RCCM Method is possible to give maintenance decision and terms in order to help the company reducing corrective maintenance, machine downtime, and incrasing company performance. Based on research output, RCCM Method make a polici maintenance fot every critical machine parts with 7 proposed maintenance task. The sum of maintenance cost based on proposed maintenance and time interval is Rp 73.989.917. meanwhile, the existing cost is Rp 126.928.667. where the result is the compane can save a maintenance cost by Rp 52.938.750 rather than company's existing maintenance cost.

Keywords : Maintenance, Reliability and Risk Centered Maintenance, Risk Matrix, Corrective Maintenance, Proposed Maintenance Task