

ABSTRACT

PT XYZ is one of fertilizer industry companies in Indonesia located in Karawang, West Java. The company production activity lasts for 24 hours. To identify maintenance and cost policy expended by company on Machine 1110 JC, Reliability Centered Maintenance (RCM) method and Cost of unreliability (COUR) are used. Centered Maintenance (RCM) method can identify the optimum maintenance policy like maintenance scheduling and cost of machine maintenance. Other method, namely; Cost of unreliability (COUR) is used to identify the loss cost expended by company for the damaged component on the machine 1110 JC. Based on the calculation and measurement by using RCM method, it is found that the maintenance policy for the component on machine 1110 JC is 9 times scheduled on condition; 2 times on stator, 3 times on Rotor, and 2 times on Gear Coupling. Then, the machine also requires 2 times maintenance on Scheduled discard task located on Mechanical Seal component. The maintenance interval time is identified different based on each task. The maintenance cost proposed is Rp.37.399.066.865 in which it is less than the existing maintenance cost. Then the COUR cost is Rp.17.716.712.514 in corrective time-based and Rp.29.439.880.650 in downtime-based.

Keywords – Preventive maintenance, Relability Centered Maintenance, Cost of unreliability.