

ABSTRACT

PT KLM is a company engaged in paper board production, commonly referred to as Coated Duplex Board (CDB) with a variety of grammage range from 250 gsm to 500 gsm. The resulting paper products must meet customer satisfaction and processing is carried out according to the standards and conditions set by the company. The machine uses a parallel system and the production process uses a continuous system so that if there is damage to one or several machines it will inhibit the production process that has been targeted so that it has an impact on losses. Therefore, the reliability of each machine needs to be considered to get a good machine performance. According to historical data from 2013 to 2017, the Cylinder machine unit 2 has the most machine damage, which is 31 times damage. In this study the Reliability Centered Maintenance method is used to determine maintenance policy according to machine characteristics, minimize maintenance costs, and determine the optimal labor force cost. Based on the research results obtained four scheduled on condition tasks, the maintenance time interval is 23 days with an estimated total maintenance cost of Rp 1,167,241,427.63 per year and labor force cost saves 16.67% from Rp 207,360,000.00 per year.

Keywords: Maintenance Cost, Labor Force Cost, Cylinder Machine, Reliability Centered Maintenance