

ABSTRACT

PT Eka Timur Raya II is an industrial company engaged in the food sector that has been processing champignons and portabello mushrooms. The Seamer SC3L 68 oz engine is the machine that suffers the most damage, which is 63 times the time interval from 2021 to 2022. This study uses the reliability and risk centered maintenance (RRCM) method which is useful for determining the proposed maintenance task, determining the maintenance time interval, and reduce maintenance costs. The main step is to determine the critical components through the risk matrix. The selected components are seaming roll and bearing roll. The results of this study for the seaming roll component have a proposed maintenance task in the form of a scheduled on-condition task. So the seaming roll component needs to be checked regularly every 21 weeks. In addition, there is a seaming roll component that has a proposed maintenance task in the form of a scheduled discard task, so that the seaming roll component needs to be replaced regularly every 15 weeks. The bearing roll component that has the proposed maintenance task is a scheduled on-condition task. So the seaming roll component needs to be checked regularly every 13 weeks. The total cost of existing maintenance for the seaming roll component is Rp11.200.208, while the proposed maintenance cost is Rp4.016.116. For the bearing roll component, the total existing maintenance cost is Rp7.000.130, while for the proposal it is Rp2.77.8718. Meanwhile, the difference between existing and proposed maintenance costs is Rp11.405.503. The proposed cost is lower than the existing one. Because companies that have not implemented the RRCM method, the maintenance activities carried out will result in maintenance costs.

Keywords — Reliability and Risk Centered Maintenance (RRCM), risk matrix, proposed maintenance task, maintenance time interval, total maintenance cost