

ABSTRACT

The development of the manufacturing industry is currently growing very well. So that companies are required to continue to compete with each other in various fields. Serambi Indonesia Company is one of the companies engaged in manufacturing, especially in the field of newspaper printing. To support the printing process, it is necessary to have a machine that operates as a newspaper printing tool, namely the Goss Community machine. Printing machines work almost every day for a certain period of time. However, the company does not know whether the machine is running effectively or not. This obstacle results in delays in the company in carrying out the process of repairing or maintaining the machine, and the inability to measure machine performance also results in machine maintenance being less targeted due to the lack of clear indicators of machine condition.

To maintain the effectiveness of the machine, a calculation is needed that can measure the effectiveness of the performance of the machine. One method for measuring machine effectiveness is Overall Equipment Effectiveness (OEE). OEE can produce the value of time utilization, the ability of the machine, the ability of the machine to produce products according to standards and produce the value of the machine's effectiveness level. For this reason, the development of facility maintenance management applications is expected to assist in monitoring and calculating the value of machine effectiveness. In this research, the method applied is a qualitative research method with data collection methods through field observations and direct interviews with production managers. In the development of facility maintenance applications using the waterfall method and testing using the black-box testing method. Based on the tests conducted on the Goss Community machine, the results show that the effectiveness of the machine is below the World Class standard. Therefore, it is recommended to conduct further checks on the condition of the machine.

Keywords: Overall Equipment Effectiveness (OEE), Maintenance Management, Waterfall, Black-box testing.