ABSTRACT

PT.XYZ is one of the largest flour mill in Indonesia. In the process of making flour, there is a packing process where the process is a process that must be passed by the last flour before the flour is distributed to consumers. Flour packing is subdepartemen that have responsible for packing flour activities. On flour packing machines, there are two machines that have a very important function in supporting the process of packing. These machines are sewing machine and carrousel. If one of the engines was damaged, then it will be very influential in the process of packing. Besides, if sewing fail in sewing machine happens is also detrimental to the company. Therefore, it is necessary to measure the effectiveness of the use of the machine using the Overall Equipment Effectiveness (OEE) or Total Equipment Effectiveness Performance (TEEP) so that the production process can proceed smoothly and the company's losses can be minimized.

Based on the calculation of OEE, the average value of OEE sewing machine falls below the standard set by JIPM. The sewing machines are FLS-MJA06, FLS-MJB01, FLS-MJB07 and FLS-MJC01. While all average value of OEE carrousel machine is below standard of Japan Institute of Plant Maintenance (JIPM), ie 85%. From the OEE measurement results, the total effectiveness of the engine performance in one year make use of the method Total Equipment Effectiveness Performance (TEEP) can be measured. The average value of TEEP from each machine still lower. The average value of TEEP sewing machine lies between 13.73% - 58.75%. While the average value TEEP carrousel machine located between 10.52% -45.04%. To find the problem root cause of the low effectiveness of the machinery used method of Root Cause Analysis (RCA).

Based on the analysis using the RCA, the main root causes of low effectiveness carrousel machine is excessive loading on the funnel packer. For sewing machines is the lack of standards in writing of PM tasks and PM inteval for sewing machines. Based on this analysis, to improve the effectiveness of sewing machine and carrousel machine can be done by determining the standard of optimal preventive maintenance activities and scheduled, reducing the heavy burden that falls into the funnel flour packer and also perform checks and maintenance on a machine or engine components most often damaged, increasing maintenance crew skills, improve operator skills and additional work time

Keyword : Maintenance Management, Overall Equipment Effectiveness, Total Equipment Effectiveness Performance, Root Cause Analysis