ABSTRACT

PT. Pindad is an military and commercial product industry and manufacture. The support of machines are heavily needed in producing military and commercial products. If a machine suddenly stops working, it would cause the production process to stop and it would cause a huge loss for the company. One production line that often experience machine break-down is the Disamatic production line. To help smoothen the production process in the Disamatic production line, an increase in performance for machine's effectiveness is needed by measuring the Overall Equipment Effectiveness (OEE) or the Total Effective Equipment Performance (TEEP).

Based on the OEE calculation, the value of OEE for the Disamatic production line on 2012 is 64,93%. This number is still far from the standard made by Japan Institute of Plant Maintenance (JIPM), which is 85%. From the OEE result, the total machine effective performance on 1 year could also be calculated using Total Effective Equipment Performance (TEEP). TEEP during 2012 for Furnace Machine was 23,5%, 22,4% for Mixer Eric, 23,8% for Disamatic Machine, 20,2% for Shakeout Machine, and 20,9% for Shotblasting Machine. Based on the calculation of Overall Factory Effectiveness (OFE) it can be seen how effective the Disamatic production line performs based on the output of its products, the OFE result on 2012 was 81%.

This research implements Total Productive Maintanance in adapting based on the condition of the company and based on the analysis of Six Big Losses factore that is dominant in increasing the effectiveness of machine usage. This is done based on TPM principles, such as: maximizing overall effectiveness, autonomous maintenance by operator, and small group activities. The result of Six Big Losses is sorted based on dominant losses which are setup/adjustment, idling and minor stoppages, and breakdown machine is decided by the man, material, machine, and method factore to decrease the Six Big Losses of machines.

Key Word: Maintenance Management, Overall Equipment Effectiveness, Total Effective Equipment Performance, Overall Factory Effectiveness, Total Productive Maintenance