ABSTRACT

PT Singa Perkasa Abadi is a company engaged in the manufacture of nails, spikes resulted in a timber with an assortment of sizes 1 inch, 2 inches, 2.5 inches, 3 inches, 3.5 inches, 4 inches, and 5 inches. The raw materials used to make nails is the size wirerod wire diameter 5.5 mm initially and then in the press according to the size of production needs. In the daily production activities, all did not escape from the problems associated with the effectiveness of machinery/equipment caused by the six big losses. Existing problems resolved by measurement of total productive maintenance such as overall equipment effectiveness, availability, production effectiveness, rate of quality, OEE six big losses, Pareto diagrams, and cause and effect diagrams. To see an increase in the effectiveness of the production is done measuring the effectiveness of DC4 and DC6 engine using OEE method followed by six big losses OEE measurements to determine the level of efficiency that is lost on the sixth factor of six big losses. Of the six factors are then sought what factors contribute to the magnitude of the efficiency of the engine resulting in DC4 and DC6. With a causal diagram can be analyzed what the problem could affect the high losses resulting in decreased engine performance. The data used is the last one year is from January to December 2013. During this period the OEE values obtained ranged from 95.21% to 91.65% and 90.22% DC4 machine to machine DC6 94.76%. The result of the effectiveness of production ranged from -98.77% to 94.90% and 94.40% DC4 engine 96.94% for the DC6 engine. Results availability ratio ranged from 97.62% to 95.71% and 95.05% DC4 engine 98.09% for the DC6 engine. RQ value of 100% due to the absence of a product defect, either reprocessed (rework) and the remainder of production (scrap / yield). OEE value is highest in February amounted to 95.21% for engine DC4, and 94.77% are in November for DC6 engine. It can be concluded that the engine used is still quite productive, but not in conditions of maximum 100%, look at the value of the lowest PE of 94.90% engine DC4 and DC6 engine by 94.40%, while the standard JIPM, PE values \geq 95%. In this case needs to be treated regularly to maintain engine performance so as not to decrease further from the current measured performance

Keywords : Total Productive Maintenance, OEE