

ABSTRACT

PT. Azmindo Metal Indonesia is a company engaged in metal manufacturing / fabrication. Constraints faced are machine performance that is not optimal anymore due to the high frequency of machine breakdowns, causing downtime which will disrupt work productivity on machines in the production process. Based on the data owned by the company, the highest damage was found on the Hurco CNC machine. The engine can be considered to be running optimally if the effectiveness value of the engine performance is high by performing one of the key performance indicator (KPI) measurements, namely the overall equipment effectiveness (OEE) method and adding a variable, namely overall resource effectiveness (ORE) or the engine effectiveness measurement method taking into account availability. Resources include humans, machines, materials, and methods. The results of the study show that the average OEE value is 75.91 % and it can be said that the Hurco CNC machine still does not meet the world class OEE standard value which is 85%. The average ORE value is 65.32 %, and it can be seen that the ORE value also has a lower percentage than the OEE value. The cause of the biggest loss or decrease in effectiveness on the Hurco CNC machine is in the factors of reduce speed losses and idling and minor stoppages losses. Both of these factors affect the performance of the machine so that production does not reach the expected level.

Keywords: Key Performance Indicator, Overall Equipment Effectiveness (OEE), Overall Resource Effectiveness (ORE), Six Big Losses, Downtime