

ABSTRACT

PT Smart Teknik Utama is an Indonesian industrial company in the city of Bandung that produces roding using frizz drilling machines. Frizz drilling machines are machines that produce all the main parts contained in rods namely pitchfork control, pitchfork moving, moving rod, control rod, F control and F moving, must have good performance and work optimally. So the maintenance policy on roding machines must be right. The method used by Total Productive Maintenance (TPM) on the frizz drilling machine to find out which maintenance system is implemented is good. The next method is Overall Equipment Effectiveness (OEE) Analysis to determine engine performance and engine effectiveness. In OEE calculation is carried out to determine the availability value, performance rate, and rate of quality of a machine, and the six big losses factor to find out what factors cause low OEE values.

The frizz drilling machine is obtained. Value of overall equipment effectiveness of drilling machine frizz, namely, availability 87, performance rate 77%, and quality rate 95%. So that the OEE value is 63%, while the biggest value of six big losses is equipment failure losses and idling minor and stoppages losses with a value of 36%. After obtaining the OEE and six big losses, an analysis of the 4 pillars of total productive maintenance (TPM) was carried out, namely autonomous maintenance, quality maintenance, education and training and planned maintenance. From the analysis of the 4 pillars of the TPM, there were proposals in the form of creating a new maintenance division job desk, damage recording sheets and controlling preventive maintenance sheets.

Keyword: Overall Equipment Effectiveness, Availability, Performance Rate, Rate of Quality, Six-big-losses, Total Productive Maintenance.