

ABSTRACT

Mining activities at PT. Mandala Karya Prima, on pit B South Swamp by open pit methods (surface mining), on mining using mechanical equipment such as excavators for demolition tools and tool loading and dump trucks as a means of conveyance. This study aims to determine the level of productivity of each mechanical devices to achieve the production target set by the company. Coal mining operations at this time using the excavator komatsu PC400 excavator loading and transportation equipment dumptruck Scania P420. Coal transported to the stockroom with a distance of 10 km.

Problems that occur at this time that the lack of the amount of rainfall in the unloading tool to the conveyance, low work efficiency and the lack of the number of units of conveyances cause coal production target of 3,300 tonnes / day was not achieved. The actual calculation results in the field of production are able to produce the tools fit komatsu PC400 is 3122.741 tons / day and production dumptruck scania P420 amounted to 2603.202 tons / day, so it should do the study and improvement of the factors that affect the performance of the mechanical device in order to achieve production targets.

Efforts to increase the production can be done by increasing the number of bulk loading tool terhdap conveyance, reduce barriers to employment that can be avoided by using a mode below the average (mean) and increasing the number of units of conveyances. After repairs bulk amount to 12, the effective working time unloading tool to increase to 76%, effective working time transport equipment increased to 75% and the number of conveyances increase to 11 units. So the production to fit the tool increased to 3385.780 tons / day and the production of transport equipment increased to 3383.765 tons / day.