

ABSTRACT

Achieving the target of overburden disassembly is not enough to meet the needs of PT. Harmak Indonesia, amounting to 13,500 bcm / month. The overburden discharge is done by stripping the soil cover layer, where the stripping material is loaded and transported to the disposal. The overburden transport activity uses Toyota Dyna 130ht dump truck. The total production of loading equipment with the current unit amount is 11.576,86 bcm / month and the production of conveyance with 1 unit is 8.038,46 bcm / month. PT. Harmak Indonesia, wants to meet the needs of 13,500 bcm / month overburden material, so to meet the desired needs it is necessary to know how many mechanical devices are used to meet the production needs.

From the results of field research of the series that affect the production in the field, production can be improved by repairing the working time of the mechanical equipment used and the addition of working time of 1 hour on each shift. The values of efficiency work of mechanical equipment also increase with the improvement of time. 85% efficiency work of mechanical equipment at present Excavator Hyundai R210-7H and 82% efficiency work of mechanical equipment on Toyota Dyna 130ht dump truck. With proper selection of efficiency work of mechanical equipment, Production of loading equipment to 13.502,91 bcm / month and production of transportation equipment increased to 9.731,69 bcm / month.

Despite choosing the appropriate working time, however, the working time of mechanical means of production of conveyance and cargo equipment is insufficient to meet the specified targets. An increase of overburden material requirement of 13,500 bcm / month by pursuing the first production of a loading device which increased to 13.502.91 bcm / month. So the need for the addition of transport equipment as much as 1 unit. The production of conveyance increases with the addition of units in PIT II PT. Harmak Indonesia. Production of conveyance increased to 14.195.08 bcm / month. Thus, an increase to meet the production target of 13,500 bcm / month loaded equipment can be fulfilled.