

ABSTRACT

Mining activities at PT. Bukit Asam (Persero) Tbk. particularly in pit 1 banko barat mine using mining methods with mechanical tools such as, excavators for destruction and loading tools as well as dump trucks as transport vehicles. This study was conducted to determine the level of productivity of each tool to achieve the production target set by the company. Coal mining activities are currently being carried out by a 2 fleet system using a Komatsu PC 400 LC excavator digging tool and transported using Scania P360 dumptruck to a dump hopper location.

The problem that occurred at this time is not reached the target of coal mining production of 300.000 ton/month. From the data of the company's report, it is known that production in March 2017 which can produce a series of mechanical device work between one unit of Komatsu PC 400 LC with seven Dumptruck Scania P360 is 262,522,5 ton/month, the production is produced from 2 fleet series work of mechanical device, while theoretically (results of observation and data processing) production from 2 fleet of mechanical device work series is 257.728,52 ton/month, so that must be done to the factors influencing the performance of mechanical device in order to reach production target.

Efforts to increase production can be done by increasing the effective working time by making improvements to the constraints that occur, improving the condition of haul roads by improving the slope of the road and the corrugated road leveling, and also the time of the tool circulation using the minimum run time obtained during observation at field, as well as adding bulk bucket of loading equipment while filling the dumptruck tub. Improvements in working time and technical conditions resulted in increased production of mechanical equipment, resulting in the production of 2 fleets loading equipment increased to 306,723.13 ton/month and production for 2 fleets of transportation increased to 321,687.6 ton/month.