

## ***ABSTRACT***

PT. Gunung Puncak Salam is a company engaged in Andesite mining. Andesite is a type of rock that is widely used for the construction sector, especially infrastructure such as roads, bridges, buildings, irrigation, dams and housing, airports, ports and others. some big clients of PT. Puncak Gunung Salam consists of BUMN, contractors, and suppliers, including PT. Wijaya Karya, PT. Dirgantara Aspalindo, PT. Dirgantara Yudha Artha, PT. Dirgantara Betonindo, PT. PP (Persero), and many others, PT. Istaka Karya, PT. Adi Karya, PT. Hutama Karya and many others.

Mining is all types of activities, technology, and business starting from prospecting, evaluation of feasibility studies, mining, processing, transportation to marketing. The mining stage itself consists of three major activities, namely: demolition/excavation (digging, breaking, losseling ), loading and transportation (hauling, trasporting) and dumping (dumping, filling), soil, rock and excavated materials using mechanical tools (large equipment) or what is often called mechanical earthmoving.

The purpose of this study was to determine the theoretical and real productivity of the digging and loading equipment, to find out the type and timing of obstacles that can affect the performance of the digging and loading equipment and to find out how to increase the productivity of the digging and loading equipment. The research method was carried out by direct observation in the field, then continued with literature study and analyzing both of them to get a good problem solving.

PT. Gunung Puncak Salam, has a production target of 45,000 tons/month at regular hours. The mechanical equipment used to support production activities is 1 unit of excavator backhoe Komatsu PC400-5 LC combined with 5 units of Hino FM 260 JD dump truck. Where from the combination of these tools is used for efforts to achieve production targets

Based on the results of the research, the actual production obtained for loading and unloading equipment is 65,730 tons/month and for transportation equipment it is 30,023.28 tons/month, where the current production target has been achieved for loading and unloading equipment, while for transportation equipment has not been achieved. Optimization of production targets is carried out by improving effective working time, time of work barriers and availability of tools (Avaibility), From the calculation results, after making improvements to effective working time, time of work barriers and availability of tools (Avaibility), thereby increasing the work efficiency of mechanical tools , and the production of digging and loading equipment after repair reached 82,791,856 tons/month and transportation equipment reached 47,406.18 tons/month, then the production target set can be met. occurred during the work that is with direct supervision by the formants.

Keywords: productivity, mechanical equipment, production targets, road geometry.