ABSTRACT

PT. Antam Tbk. Ltd. is one of the mineral mining industry owned Indonesian state-owned enterprises, which involved in the Gold Mining Business Unit located in Mount Pongkor, Bogor, West Java. PT Antam Tbk. UBPE Pongkor gold ore mining operations using underground mining system that implements the method *overhand cut and fill* and *shrinkage stoping* with a production target of 6.500 tons per month. Actual production of mechanical devices obtained for *Jumbo drill* by 6.093,9 tons/month at Ciguha mine and 6.787,8 tonnes/month at Kubang Cicau mine, as well as on conveyance machine *LHD* loads of 6012 tons/month at the Ciguha and 6.535,8 tons/month in Kubang Cicau. Actual productivity generated by the mechanical equipment at the Ciguha has not reached set production target, but the chirping Kubang had reached the target. As planned increase in production at the Ciguha and Kubang Cicau of 10.000 tons/month in future at each of the mine sites, it is necessary to evaluate the productivity of mechanical equipment which took place at this time in order to meet the production target.

Failure to achieve production targets due to the presence of obstacles, either avoidable obstacles or barriers that can not be avoided. These constraints led to the low efficiency of mechanical equipment. The actual work efficiency mechanical equipment in mining activities categorized as deficient because of the value of the work efficiency of less than 65% (Drevdahl, 1970). The efficiency work of the drilling activity is in Ciguha 54,33% and 58,63% in Kubang Cicau, as well as the work efficiency of the transport loading activities at the Ciguha amounted to 51,77% and 53,2% in Kubang Cicau.

Applied to improve the productivity of mechanical equipment is the improvement of work efficiency by eliminating the obstacles that can be avoided.. Because of an increase in labor efficiency, productivity of mechanical equipment also increased to 13.076,1 tons/month Ciguha and 12.958,2 tons/month in Kubang Cicau for *Jumbo drill* and 13.453,2 tons/month at Ciguha and 14.556,6 ton/month at Kubang Cicau for *LHD* transport and unloading tools. The result is impressive because it can exceed the expected production target of 6.500 tons/month, so an increase in the production target of 10.000 tons/month can be implemented.
