

ABSTRACT

PT. Kotabesi Iron Mining is a company engaged in the mining of iron ore in the village Kenyala, Telawang district, East Kotawaringin district, Central Kalimantan province. Target production company 150.000 tons/month and has a 1 excavator loading and transportation equipment 15.

Based on the reality on the ground is still going clash between the working excavator loading and transportation means that the real productivity of mechanical devices that work not in accordance with the planned production targets. Production is reached 115.871,33 tons/month.

The research objective here is to determine the compatibility of work loading tools and transport equipment as well as to determine the production capacity of using 1 unit backhoe and dump truck 15 units in iron ore production target of 150.000 tons/month.

In this study the authors simply review the mining activities which fit the tool works is 1 unit Backhoe Excavator CAT 325 D with 15 conveyances Hino FM 260. Production equipment is fit 209.398,8 tons/month and production conveyance was 132.309,3 tons/month. Assessment of the cause of failure to achieve production targets by a mechanical device is focused on improving the performance of conveyance only, includes effective work time, work efficiency and compatibility tools work happening at the moment.

Efforts to achieve the target production is done by increasing the effective working time conveyance of 10,15 hours/day to 11,51 hours/day. Increased working time effective conveyance then increased work efficiency also conveyance of 78 % to 88,58 %. Increase the production target was reached 150.255,9 tons/month.

Compatibility tools work by using 1 unit of loading Exavator CAT 325 D and 15 units of dump truck conveyance HINO FM 260 JD is at 0,63 with the waiting time for loading excavator 0,83 minutes.