

ABSTRACT

PT Indocement Tunggal Prakarsa Tbk. Unit Palimanan is a cement company located in Gempol Subdistrict, Cirebon District of West Java Province. Research location is in Quarry trass material kedongdong where mining activities do by PT Karya Kita Putra Pertiwi. Trass material mining activities currently carried out using 1 unit Excavator Kobelco SK-200 and 10 units Dump Truck Mitshubishi Fuso 6x4 HD FN 527 MS. The distance from the mining front to crusher is 5,487 m.

The problem that occurred at this time is not reached its production target of trass material of 2,400 ton/day. The current actual production of the excavator is 2,247 ton/day and for dump truck is 2,086 ton/day. This is due to the optimal amount of bulk loading bucket..

Efforts can be made so that the production target of trass material by improving the circulation time of the equipment and increasing the bulk of the loading bucket. The loading time of loading excavator after repairs from 0.25 minutes to 0.22 minutes and the transport time of dump truck from 46,32 minutes to 44.5 minutes. After repairs circulation time of the equipment, the production capacity is 2,554 ton/day for excavator and 2,171 ton/day for dump truck.

After repairs the circulation time of the equipment, production of dump truck has still not been achieved, so it is necessary to increasing the bulk of the loading bucket from 17 bucket to 19 bucket and change circulation time of dump truck from 44.5 minutes to 44,96 minutes. After increasing the bulk of the loading bucket, the production of dump truck becomes 2,401 ton/day and the production of excavator is 2,554 ton/day. Thus the production target of trass material of 2,400 ton/day can be met.