

ABSTRACT

PT. Sepakat Karya Mineral is an enterprise engaged in the andesit mining located in Manggilang Village, Pangkalan Koto Baru Subdistrict, Lima Puluh Kota Regency, Province of West Sumatera. Operation of mining in PT. SKM is conducted by surface mining system with *Quarry* method.

At this current time, PT. Sepakat Karya Mineral just gotten area of Izin Usaha Pertambangan (IUP) exploration and will submit permit about Izin Usaha Pertambangan (IUP) operation production. The andesit production by PT. SKM is targetted at 20.000 BCM/month. For the operational mining process, PT SKM use mechanic equipment which are Excavator Backhoe Komatsu PC 200 and Dump Truck Hino FM 260 JD.

The problem in the current situation is determining how much unit of Excavator and Dump Truck to achieve the production target. To solve this, we need to calculate production capacity of Excavator Backhoe Komatsu PC 2000 and Dump Truck Hino FM 260 JD then analyze match factor for both equipments.

After the evaluation and calculation of the both equipment, production capacity of Excavator Backhoe Komatsu PC 2000 amounted to 10.835,47 BCM/month and Dump Truck Hino FM 260 JD amounted to 1.616,112 BCM/month. Therefore, to acvhieve the production target, it needed 2 unit of Excavator Backhoe Komatsu PC 2000 and 13 unit of Dump Truck Hino FM 260 JD. As for the match factor between Excavator Backhoe Komatsu PC 2000 and Dump Truck Hino FM 260 JD amounted to 0,96.