## **ABSTRACT**

Yuni Kurniawati. 2019; optimisation of productivity tool Dig Fit Excavator Caterpillar 330D and Loading a Dump Truck 220 MitsubisHi Fs On coal mining in the Pit 3 pt. Dizamatra Powerindo Village West of Merapi Subdistrict Kebur Lahat Regency of South Sumatra Province "

PT. Dizamatra Powerindo is one of the private company engaged in coal mining, located in the village of Merapi, the Kebur Barat, Lahat, South Sumatra Province. Mining operations at the site of Pit 3 pt. Dizamatra Powerindo mining system and method of strip mine with a combination of tools and tool loading and unloading of gali. Coal mining activities carried out using Excavator Galien tools fit 1 Caterpillar 330D with a combination of 5 transport tool unit Mitsubishi Dump Truck 220 Fs

Coal production target of PT. Dizamatra Powerindo in November 2018 of 120,500 tons. After the study turned out to be the results obtained did not reach the target, namely of 99,318.28 tons/month, this is because the low work efficiency. To achieve the target of coal production in November 2018, improvements need to be made effective working hours so that the production targets are achieved.

Where once done repair work time effective then obtained work efficiency Tool dig fit Excavator Caterpillar 330D 65% and transport tools work efficiency Mitsubishi Dump Truck 220 Fs amounted to 64%. production results for 1 unit of Excavator Caterpillar 330D with a combination of 5 transport tool unit Mitsubishi Dump Truck 220 Fs amounted to 121.716,57tons/month with a target production of 120,500 tons/month

**Key Words: Optimization, Work Efficiency, Production.**