

## ABSTRACT

PT.Mitra Indah Lestari is one of the coal mining company located in East Kalimantan. Mining system implemented by PT. Mitra Indah Lestari is a system of open pit mines. One of the consequences of the system of open pit mining is the discovery of the overburden material (overburden), which led to the need for handling the placement of overburden material (over-burden) . It is necessary to remember the smoothness of a surgical removal of overburden material from the pit to the disposal will determine the smoothness of a mining activity.

Loading and transportation of the overburden using a mechanical device. At the loading point using a combination of backhoe PC 400 capacity bucket 1, 6 m<sup>3</sup> - 2 m<sup>3</sup> with ADT unit Komatsu HM400 and TA400 terex furthest transport distance of 600 meters.

The problem faced today is the fuel consumption is still less than optimal for mining activities in Pit 88 South, which uses different means of transport as much as 2 different types: Komatsu HM400 and Terex TA400 It's caused that the front area there is still a path toward disposal that need to be repaired or lowered grade can thus be optimized fuel consumption. Efforts are being made to correct this condition is to make the grade to a maximum of 4% so that when ADT beroperasi not require large rimpull. with the goal when the rain comes road conditions remain good. Fuel Consumption after the repair has increased. Can we see the tool Komatsu HM400 fuel consumption initially 30.6 liters / hour, after a 2% grade lowered fuel consumption becomes 27.79 liters / hour. While the tool Terex TA 400 fuel consumption was originally 30.58, after a 2% grade lowered fuel consumption becomes 29.51. From these results, Komatsu HM400 is the most suitable tool for field conditions and the use of minimum fuel consumption.