

ABSTRACT

The study was conducted at the Grasberg Mine, PT Freeport Indonesia Open, Papua. Where the Grasberg open pit, loading material mined loaded using the Shovel then transported using a combination of the conveyance dump truck to move the mined material to the stockpile or directly to the crusher. In this particular study used 3 large Shovel to the top of the pit Shovel Bucyrus 495, PH 4100 XP, PH2800 XP with combined with Komatsu Dump Truck 930 E.

Specifically at the Grasberg open pit, Department of PT Freeport Indonesia's Grasberg Engineering has set a target of an average production at Production Equipment Plan 2010 for the shovel, apparently there are still some who have not yet reached shovel average production target has been determined, particularly for 2010, the Bucyrus Shovel 495, PH 4100XP, 2800XP PH each production target average mean is 2,817 TPH, TPH 2,479, 2,109 TPH. While the results of its actual production average of 495 Bucyrus Shovel, PH 4100XP, 2800XPPH is 2,592 TPH, TPH 2,388, 1,768 TPH

This is caused by several factors that affect the productivity of unloading excavator in the Grasberg open pit. First is Bucket Filling factor at each shovel production. From the data processing can be in the know that the bucket fill factor value at each shovel not optimally (80%), so there are still about 20% which can be optimized at the time of excavation or prevent spillage of material during the loading process.