

ABSTRACT

Production of gold ore and silver mines of PT. Meares Sopotan Mining is currently at 5,568 tons ore/day. Due to some obstacles such as; effectiveness and value of crusher reduction ratio is low, resulting in relatively coarse-sized products, and other obstacles that make the performance of the crusher unit unoptimum. For that purpose, the evaluation on the performance of the crusher, and the efficiency of working hours.

Data processing is done by distributing the size and tonnage of feed and product, calculating the real capacity and design of the crushing unit, and measuring the setting of the crushing unit. From the result of data processing got the value of reduction ratio and effectiveness of breaking tool that is 5.50 and 29.82% for gyratory crusher, and 2.4 and 39.14% for the cone crusher stating that the performance of the crusher is not too heavy. To improve the performance crusher unit is recommended to make changes to settings and additional crusher crushed in tool grinding media, as well as evaluating the performance of other crushing equipment. From the evaluation of the value of the reduction ratio of the crusher and the effectiveness of the crusher unit will increase and will result in a smoother-sized product.

The benefit of this research is to be input for PT. Meares Sopotan Mining in optimizing the performance of any crushing equipment.

