

ABSTRACT

PT. Arga Wastu is an andesite mining company located in the Sanetan Village, Sluke Subdistrict, Rembang District, Central Java Province. Materials of andesite sufficient the feed of the crusher gotten by directly mine in in the Sluke Site, Sluke Subdistrict, Rembang District, Central Java Province

The process of andesite crushing at PT. Batu Mulyo Berjaya uses a Jaw Crusher MR 10 C 1000 x 800 Dragon then on the secondary use crushing Gyratory Crusher BS 700 Dragon. The product such as crushed stone with a size -50+ 20 mm, , -20 + 10 mm, -10 + 5 mm and -5 mm.

In the crushing process has the problems in the crusher unit that is not fulfillment of the planned production target 210 ton/hours total number of products. Nowadays the total production is 121,17 ton/ hours and production targets at fraction -20 + 10 mm that can not comply market request because it has increased. Therefore, it is expected that the product of -20 + 10 mm can be increased and the product of -50 + 20 mm, -20 +10 mm, -10 + 5 mm, and -5 mm can be decreased. And then make efforts to change jaw crusher setting and gyratory crusher setting.

The result of the evaluation of the current of 373,67 ton/hour feed. 111,3 ton/hour for jaw crusher feed and 98,70 ton/hour for gyratory crusher and than 163,67 ton/hour oversize is metrial balance. Reduction ratio 80 in the jaw crusher primery and jaw crusher secondary were 85,28% and 84,56% and yhe only alternative is selected.. Reduction ratio 80 in the jaw crusher primery and jaw crusher secondary were 88,88% and 81,23% and the only alternative is selected.