

## ABSTRACT

Andesite stone crushing activities at PT. Semut Geni consists of two stages of crushing, using a Jaw Crusher as the first crusher and Cone Crusher as the second crusher. The raw material for this Andesite stone crusher manufacture is derived from local mining that transported to PT. Semut Geni using the Dump Truck Isuzu Elf. The products produced as the crushed stone with sizes :

1. -25 + 5 mm, with production capacity is 20,79 ton/hour.
2. -5 mm, with production capacity 4,56 ton/hour.

Production target set by PT. Semut Geni is 300 tons / day. The capacity of Andesite stone crusher only can produces Andesite stone with size of -25 + 5 mm and -5 mm in the amount of 25.35 tons / hour or 200 tons / day (66.67% of target) so that there is still a deficiency of 100 tonnes / day.

To achieve the 300 tons / day production target set by PT. Semut Geni, it is necessary to do an assessment of the crusher unit tool availability, an assessment of the reduction ratio, an assessment of the effectiveness of the crusher, and the effectiveness of working hours. Efforts to do to meet the production target of 300 tons / day are :

1. The addition of the feed of crusher unit from 25.35 tons / hour to 38.03 tons / hour.
2. Cone Crusher's open setting changes from 30 mm to 20 mm, with the same a double deck screen's efficiency like before the reparations.

The results obtained after doing improvements, 38.03 tons / hour and working time of 7.89 hours / day as the final yield, so the production targets that are targeted by the company in the amount of 300 tons / day can be reached.