

ABSTRACT

PT. Dahana be one of the contractors on highway construction projects palimanan Cikampek, PT. Dahana in this case serving the construction clearing forests for construction of roads by means of drilling and blasting. highway construction projects located in Cikampek palimanan Ciwaringin Village, District palimanan, Cirebon, West Java Province.

PT. Dahana on this project concentrated on one location, namely Bukit Salam, Problems that occur when this is the result of blasting the fragment size in accordance with the targets have not achieved the desired outcome measure is the percentage of blasting ≤ 30 cm in diameter $\geq 80\%$.

The results are andesite blasting will be used in accordance with the requirements under the assumption that the fragment size ≤ 30 cm will be used for hoarding location low and blasting results $>30 - 60$ cm fragment size to be used for the casting of roadblocks and the construction of water channels.

Target size fragments blasting current results are not achieved due to very large percentage of boulder size > 30 cm by $> 20\%$. The cause of the formation of a high percentage of them boulder caused by the incompatibility in the determination of the geometry blasting particular burden and spacing.

Attempts to reach the fragment size blasting the desired results be improved blasting geometry using several theoretical approaches and proposals prepared 5 pieces of geometry based on the value of burden and different spaces. Recommendations geometry blasting is done with Kuz-Ram approach. Percentage of fragment size ≤ 30 cm blasting results by 91.23%.