

ABSTRACT

PT. Newmont Nusa Tenggara (PT NNT), is a copper and gold ore mine located in the Batu Hijau, West Sumbawa. In mining PT. Nemont Nusa Tenggara drilling and blasting method for the process of the rock. The process of awarding is done to relieve the parent rock of the rock, so as to facilitate the subsequent mining process.

During this PT. Nemont Nusa Tenggara in analyzing the results of blasting fragmentation in the field using only a *split-desktop* software using the shooting method on the surface of detonation (*Muckpile*) by using two balls as objects of comparison. The other method used is the *kuz-ram* models to predict blasting fragmentation results before blasting activities take place.

In connection with it will be an assessment of the results of blasting fragmentation using a split-desktop and model that Kuz-ram-ram Kuz later models can be used to predict blasting fragmentation of the design geometry imposed by the company.

Based on field observations of the model estimates the resulting fragmentation Kuz-ram (*Theoretically*) greater than the results predicted split-desktop which is a result of direct observations in the field for each rock. The level difference in size rock fragments resulting average model of *kuz-ram* for p20 in *Diorite* rocks of 11.65 cm, 27.22 cm for P50, P80 of 55.58 cm, and the top size of 314.13 cm. On the rocks *Vulkanic* to p20 by 9.84 cm by 18.18 cm P50, P80 of 37.97 cm, and the top size of 231.19 cm. In *Tonalite* rocks to p20 by 8.08 cm, 12.65 cm for P50, P80 of 25.15 cm, and the top size of 151.69 cm.