

A FRACTAL AND DAMAGE MODEL FOR ROCK-BREAKING BY BLASTING

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Abstract

The paper proposed a fractal and damage model for rock-breaking by blasting, which assumed that the process of rock-breaking results from intrinsic fractal development and the accumulation of damage. Remarkably, the process is of fracture character. Based on the model, a computer program is compiled to calculate the 3-dimension damage distribution in blasting crater. Trial results agree well with the predicted results, showing the model set up in the paper is sound.

Key words: blasting, fractal, damage