

Observation and Numerical Simulation of Fly Rock caused in Bench Blasting

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ABSTRACT

Test blasting was carried out to study the flying characteristics of rock mass caused in bench blasting. The quantity of explosives was increased from 7.6kg to 9.1kg and the Minimum burden was changed from 131mm to 451mm. The effect of condition for the characteristics of fly rock were considered. The fly rock was observed using the high-speed camera and video to study the flying characteristics of the rock mass caused in the bench blasting. Numerical simulation of fly rock was carried out using DDA (Discontinuous Deformation Analysis) method. It was clear that the DDA method can be applied in the simulation of fly rock caused in bench blasting.