

"INFLUENCE OF THE GEOMECHANICAL CHARACTERISTICS OF THE ROCKS AND OF THE TYPE OF EXPLOSIVE ON THE ABSORPTION OF THE ENERGY INDUCED IN THE ROCK BY THE EXPLOSIVES"

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ABSTRACT

An experimental investigation on the trend of cratering induced by explosives placed on rock masses was carried out. By using various types of explosives and rocks having different geomechanical parameters, it was possible to evaluate the influence of the explosive-rock coupling. Furthermore, the importance of the parameters defining the rock and the explosive for the absorption of energy induced in the rock mass, is pointed out.

Finally, in view of blasting, for cylindrical and spherical explosions the relationships between the crushed zone and the extension of the fracture zones around the explosion cavity, were analysed.