

Study of the Stability of the Slope Open-Pit Mines: Case of the Mine of Phosphates - Tebessa, Algeria

Authors : Mohamed Fredj, Abdallah Hafsaoui, Radouane Nakache

Abstract : The study of the stability of the mining works in rock masses fractured is the major concern of the operating engineer. For geotechnical works in mines and quarries, it there is not today's general methodology for analysis and the quantification of the risks relating to the dangers inherent in these concrete types (falling boulders, landslides, etc.). The reasons for this are uncertainty, which weighs on available data or lack of knowledge of the values of the parameters required for this analysis type. Stability calculations must be based on reliable knowledge of the distribution of discontinuities that dissect the Rocky massif and the resistance to shear of the intact rock and discontinuities. This study is aimed to study the stability of slope of mine (Kef Sennoun - Tebessa, Algeria). The problem is analyzed using a numerical model based on the finite elements (software Plaxis 3D).

Keywords : stability, discontinuities, finite elements, rock mass, open-pit mine

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