

Study of the Stability of Underground Mines by Numerical Method: The Mine Chaabet El Hamra, Algeria

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Abstract : Method room and pillar sizes are key factors for safe mining and their recovery in open-stop mining. This method is advantageous due to its simplicity and requirement of little information to be used. It is probably the most representative method among the total load approach methods although it also remains a safe design method. Using a finite element software (PLAXIS 3D), analyses were carried out with an elasto-plastic model and comparisons were made with methods based on the total load approach. The results were presented as the optimization for improving the ore recovery rate while maintaining a safe working environment.

Keywords : room and pillar, mining, total load approach, elasto-plastic

Conference Title : ICMENT 2016 : International Conference on Mining Engineering and Metallurgical Technology

Conference Location : Venice, Italy

Conference Dates : August 08-09, 2016