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Analytical Technique of Gravel Propensity in Coal pit

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Abstract

In terms of surrounding rock with rock burst tendency in coal mine, the rock burst occur when elastic energy accumulation of rock mass system for rock mass deformation reached the limit of rock mass energy storage, and the condition that the factors effected elastic energy accumulation needed to meet can be laid out. The rock burst tendency analysis can be defined as a progress as following: making sure the stress condition of surrounding rock and the. For the purpose of forecasting rock burst effectively, the problems of rock burst tendency need to be analyzed theoretically, analytical model should be put forward for the better understanding about rock burst occurrence mechanical mechanism of surrounding rock system, and the effective rock burst prediction index can be put forward. In this paper, taking the Granite circular tunnel for example, rock burst tendency problems are studied theoretically using the method mentioned above.

Keywords: analytical technique; gravel propensity; gravel burst constitutive form; energy storage mode; coalpit