Three-Dimension excitation model of mechanism of mines seismic and its application

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Summary

Currently mines seismic emergence mechanism is unclear. To solve this problem, the article analyzes the occurring mechanism of mines seismic and studies the mines seismic classification. Meanwhile we establish three-Dimension excitation model of mines seismic, then derive the propagation model of mines seismic. Research shows that Coal-rock mass produced brittle fracture when outside force to exceed its ultimate strength in complex stress, after the release of energy generate mines seismic. The establishment of the model explains mines seismic occurrence mechanism, and provides the theoretical foundation for mines seismic magnitude calculation and accurate Orientation in the future.