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The Influence of Earthquakes on Open-Pit Slope Stability

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ABSTRACT

Estimation of stability of natural slopes, embankments, dams and open-pit slopes during earthquakes are complex and non-linear problems, therefore physical modeling is used for decision of it. As a result of physical modeling the pattern of seismic vibrations impact based on the movement process of probable collapse prism delineated by the most stressed plane of sliding has been established. Particular recommendations on the basis of safety factors selection in seismoactive zones are given.

KEYWORDS

Earthquakes; Open-Pit Slope Stability; Safety Factor; Pseudostatic Approach

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