

Three-dimensional effect of stresses in open stope mine design

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© 2017, © 2017 Informa UK Limited, trading as Taylor & Francis Group. The stability graph method is widely used for open stope mine design. During the development of the method the effect of induced stresses were included by using two-dimensional or limited three-dimensional stress analysis. In this paper, three-dimensional numerical models are used to develop new induced stress curves, and to evaluate the effects on the stability graph method and open stope mine design. Significant differences are identified for the estimated stresses at the wall of the stopes, leading to an increase of the size of the stopes.