



Behavior of Simulated Longwall Gob Material

By -

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.This report presents results of a U.S. Bureau of Mines study of longwall gob material. The objective of this work was to determine material stiffness properties of the gob for use in numerical models of rock mass response to longwall mining. Photographs of actual mine gob were digitized to obtain approximate particle size gradations of gob material. The gradation curve was shifted down to a laboratory scale, and 20 uniaxial compression tests were conducted. Varying the maximum particle size was not found to affect the stress-strain behavior, but changing the gradation appeared to influence the stress-strain behavior. The stress-strain relationship of the simulated gob material was nonlinear, the stress-secant-modulus relationship was approximately linear, and the stress-tangent-modulus relationship was approximately a second-order polynomial function. Equations were generated from these curves, providing numerical modelers with a means to estimate gob moduli based on the stress level. In addition, the experimental data were statistically evaluated using multiple regression analyses, producing a series of equations to predict the scant and tangent moduli from the given stress level, bulking factor, rock strength, and...



READ ONLINE
[2.91 MB]

Reviews

These kinds of ebook is almost everything and got me to searching forward and a lot more. It usually does not price excessive. Its been written in an exceedingly basic way and is particularly only following i finished reading through this pdf through which in fact modified me, alter the way i really believe.

-- **Athena Jones**

I just started out reading this pdf. It is full of wisdom and knowledge You are going to like just how the blogger publish this publication.

-- **Lily Gorczany**