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论文

浅谈矿井水害立体防治技术体系

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摘要:

基于矿井水害的防治技术及系统性、动态性等特点, 论述矿井水害发生的根本原因及构建矿井水害立体防治技术体系的重要性, 分析了矿井水害立体防治技术体系、构成及立体性、技术体系性分类特点, 按立体空间位置及软件措施、危险程度及控制措施、系统的影响要素等特征进行几种分类方法的论述, 重点给出了影响因素分类系统中矿井地表水害防治技术子体系、地下水害立体防治技术子体系等分类、特点及适用范围, 并将立体防治技术在北皂矿井海下采煤水害防治研究中进行了体系构建、分类及防治技术综合实例应用, 取得了较好的效果。

关键词: 矿井水害; 立体防治; 技术体系

Discussion on the technical system of solid prevention and-control on mine flooding

Abstract:

Based on the systematic and dynamic characteristics of mine water disasters prevention technologies, this paper discusses the fundamental courses of flooding in mines, and the importance of establishing a three dimensional flood prevention and control system. It also analyzes the three dimensional flood prevention and control system, its structure and dimensionality, as well as its technical system classification features. On the basis of stereo space location and software measures, the degree of risk and its control measures, the system impact factors, the paper discusses several classification methods, in particular, presents the key influence factors of the classification system of mine surface water disasters prevention and control sub system, underground water disasters prevention and control technologies, such as three dimensional sub system classification, its characteristics and applicable scope. This paper also investigates the structure and classification of the three dimensional control system in the Beizao mine, in combination with practical applications of comprehensive prevention and control technologies, and a positive result is achieved.

Keywords: mine flood; solid control; technological system

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