

论文

矿井水害类型划分及主要特征分析

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摘要:

在构建矿井水害分类依据(即充水水源、矿层与充水含水层彼此位置和接触关系、导水通道、危害形式、经济损失与人员伤亡、时效特征等)基础上,对基于不同分类依据的矿井水害类型进行了系统划分,即天然充水水源型矿井水害、人为充水水源型矿井水害;顶板充水型矿井水害、底板充水型矿井水害、周边充水型矿井水害;天然通道型矿井水害、人为通道型矿井水害;常温矿井水害、中高温矿井水害和腐蚀性矿井水害;一般型、较大型、重大型和特别重大型矿井水害;即时型、滞后型、跳跃型和渐变型矿井水害。在此基础上,对各主要类型矿井水害的成灾机制和典型特征作了重点分析。

关键词: 矿井水害; 类型划分; 主要特征; 充水水源; 导水通道

Type classification and main characteristics of mine water disasters

Abstract:

On the basis of ascertaining the classification bases of mine water disasters, i.e. water source, passage, spatial distribution relationship, hazard form, economic loss and casualties, aging characteristics, various water disasters were systematically classified in this study. They can be classified as either natural or artificial source water disasters according to their sources; roof, periphery or floor water disasters according to the spatial relationship between water sources and ore body; natural or artificial passage water disasters according to their passages; normal temperature, moderate to high temperature or corrosive water disasters according to hazard forms; general, larger, very large or extremely large water disasters according to economic loss and casualties; instant, hysteretic, abrupt or gradual water disasters according to time dependent water inrush quantity. Finally, the formation mechanism and typical characteristics of main water disasters were also analyzed.

Keywords: mine water disaster; type classification; main characteristics; water source; water passage

收稿日期 2012-04-16 修回日期 2012-07-04 网络版发布日期 2013-04-25

DOI:

基金项目:

国家自然科学基金资助项目(51174289, 41102180); “十二五”国家科技重大专项联合资助项目(201105060-06)

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