

论文

矿井通风系统环境温度实时计算与应用

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摘要:

结合矿井通风网络解算,对矿内通风巷道风流温度进行了实时计算与分析.首先对影响风流温度的不同热源进行了分类,选定了基本热源计算公式;然后根据对矿井不同特征巷道的划分,对不同性质的巷道进行了分析,最后结合大强煤矿实际状况,计算并分析了矿井风流温度参数.成果可为高温矿井的系统开拓、改扩建和通风系统的设计提供参考.

关键词: 矿内环境; 环境风流温度; 热源; 通风网络; 风流温度计算

Real-time calculation and application of mine ventilation system environmental temperature

Abstract:

Based on the mine ventilation network calculation in this paper,all the mine ventilation system ambient temperature was real-time calculated and analyzed.First,different heat sources that effect the airflow temperature were classified and the basic calculation formula of heat sources was determined; second,according to compartmentalization of various types of roadway,different quality of the roadways was analyzed; finally,combined with the actual conditions of coal mines,ventilation system airflow and temperature parameters were calculated.These achievements can provid theoretical basis and reference value not only for the system' s exploitation,reconstruction and development,but also for the design of ventilation system.

Keywords: mine environment; environmental airflow temperature; heat source; ventilation network; airflow temperature calculation

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