

论文

硫铝酸盐-铝酸盐水泥体系高水充填材料的研制试验

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摘要:

研究了用硫铝酸盐-铝酸盐水泥体系制备高水充填材料的方法, 进行了单浆凝结时间、胶凝时间、抗压强度的测试。结果表明, 用细度较粗的铝酸盐水泥熟料替代5%~30%的强度级别42.5 MPa硫铝酸盐水泥的熟料制备高水充填材料, 对材料的胶凝时间有所影响, 使材料的2 h强度稍有降低, 但可大幅度提高材料的后期强度, 28 d抗压强度最大可提高48.9%, 可以制备出满足MT/T 420—1995标准要求的高水充填材料。

关键词: 硫铝酸盐水泥 铝酸盐水泥 高水充填材料

Experimental study on high moisture filling material prepared with sulphoaluminate aluminate cement

Abstract:

The properties of the highmoisture filling material prepared with sulphoaluminatealuminate cement were studied by determing the setting time of every single slurry, setting time of the filling material, and the compressive strength of cement pastes. The results show that subsituting 5%~30% sulphoaluminate cement clinker(42.5 MPa)with the coarser aluminate cementclinker has effect on setting time of the filling material, and subtly decreases the early age(2 h) strength, and the late age strength will be largely increased, the late age(28 d) strength even exceeds that of the filling material without substitution of sulphoaluminate cement clinker to 48.9%. The highmoisture filling material prepared with subsituting 5%~30% sulphoaluminate cement clinker(42.5 MPa) with the coarser aluminate cement clinker can meet with the requirements of the standard of MT/T 420—1995.

Keywords: sulphoaluminate cement; aluminate cement; high-moisture filling material

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