

Ni(OH)₂ 表面包覆对 MH/Ni 电池性能的影响

李 方¹, 杨毅夫¹, 危亚辉², 孙英婴¹

(1.湖南神舟科技股份有限公司, 湖南 长沙 410004; 2.长沙矿冶研究院研发中心, 湖南 长沙 410012)

摘要: 用钴、钇、钙共沉积表面包覆处理的球形 Ni(OH)₂ 与未处理的球形 Ni(OH)₂ 制成两种 10 Ah 电池, 对常温充放电、高温充电和低温放电进行测试。结果表明: 球形 Ni(OH)₂ 经钴、钇、钙共沉积表面包覆处理, 可提高电池的高温充电性能。

关键词: MH/Ni 电池; Ni(OH)₂; 高温充电效率; 表面包覆

中图分类号: TM912.2 文献标识码: A 文章编号: 1001-1579(2004)03-0178-02

Effects of Ni(OH)₂ surface coating on performance of Ni/MH battery

LI Fang¹, YANG Yi-fu¹, WEI Ya-hui², SUN Ying-ying¹

(1. Hunan Shenzhou Science & Technology Co., Ltd., Changsha, Hunan 410004, China; 2. Research & Development Center, Changsha Research Institute of Mining & Metallurgy, Changsha, Hunan 410012, China)

Abstract: 10 Ah experimental batteries were made with two kinds of spherical Ni(OH)₂ materials. They were coated with or without Co, Y and Ca by co-precipitation method. The performance of charge and discharge at room temperature, charge at high temperature and discharge at low temperature was tested and analyzed. The results showed that as the spherical Ni(OH)₂ was coated with Co, Y and Ca on the surface, the charge performance of Ni/MH battery at high temperature was greatly improved.

Key words: Ni/MH battery; Ni(OH)₂; high temperature charge efficiency; surface coating

电池杂志

BATTERY BIMONTHLY