MH/Ni 动力电池的分选及性能

陈 晖,吴伯荣,朱 磊,简旭宇,杜 军,蒋利军,刘明义

(北京有色金属研究总院能源材料与技术研究中心,北京 100088)

摘要:研究了燃料电池城市客车用 MH/Ni 动力电池的分选组合方法及充放电性能。分别采用 LBC-80 方形动力电池检测分析系统和电动车用动力电池仿真测试系统对 100 Ah MH/Ni 动力电池进行分选,选出 320 只单体电池,并进行了 12 V 模块的组合。结果表明:分选组合而成的 12?V 模块在比能量高于 55?Wh/kg 的前提下,具有 3 C (300 A) 持续放电大于 3 min 的能力。根据 384 V/100 Ah 电池组不同 DOD 条件下脉冲功率容量测试计算得知,该电池组可以充分满足燃料电池城市客车使用要求。

关键词: 电动汽车; MH/Ni 动力电池; 电池分选组合; 台架实验

中图分类号: TM912.2 文献标识码: A 文章编号: 1001-1579(2004)02(0099-03

Selection and performance of Ni/MP power batteries

CHEN Hui, WU Bo-rong, ZHU Lei, JIAN Xu DU Jun, JIANG Li-jun, LIU Ming-yi

(Research Center of Energy Materials and Technology, Beijing General Research Institute for Non-Ferrous Metals, Beijing 100088, China)

Abstract: The charge-discharge performance and selection method for use of the fuel cell city bus were studied. The tests were done on LBC-80 type equipment. 320 power batteries were selected from batteries with 100 Ah by the power battery simulated test system. The experiment indicated that the selected batteries showed excellent high-rate capability, conformability and reliability. **Key words:** electric vehicle(EV). If MH power battery; battery selected and assembled; simulated test