双极叠层 MH/Ni 电池的研究

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摘要: 双极叠层 MH/Ni 电池是很好的混合电动车(HEV)用高比功率电池,能够提供较高的电压和功率密度,与传统的圆柱形和方形 MH/Ni 电池相比,它具有性能上和成本上的双重优势。实验采用特殊的密封技术,制成包含 5 只单体电池的叠层电池,并测试其电化学性能,认为封口活化的贫液设计电池性能较好,进一步优化了电池设计。

关键词: 双极性; MH/Ni 电池; 高功率密度

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Research of Ni/MH battery with bipolar stack design

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Abstract: Ni/MH batteries with bipolar design offered some at an analysis as a power storage system such as hybrid electric vehicles. It offered performance advantages and cost reductions as compared with conventional cylindrical and prismatic designs. Dealed with some aspects of combining five cells in a special way of edge seal, the performance of bipolar battery with a limited amount of starved electrolyte was obviously better than the battery with an abundant electrolyte.

Key words: bipolar design; Ni/MH battery; high power density