

VRLA 电池的早期容量损失述评

王 瑜^{1,2}, 魏 杰¹, 唐 征²

(1. 哈尔滨工业大学应用化学系, 黑龙江 哈尔滨 150001; 2. 浙江南都电源动力股份有限公司 浙江 杭州 310013)

摘要: 归纳了 VRLA 电池早期容量损失(PCL)现象的失效模式, 对 VRLA 电池的 PCL 研究进展进行了分析, 介绍了凝胶-晶体结构、球聚集模型、阻挡能层模型 3 种理论。提出了预防和恢复 PCL, 提高电池深循环寿命的方法。

关键词: 早期容量损失; 正极活性物质; 界面; 腐蚀层; VRLA 电池

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A review on premature capacity loss of VRLA battery

WANG Yu^{1,2}, WEI Jie¹, TANG Zheng²

(1. Department of Applied Chemistry, Harbin Institute of Technology, Harbin, Heilongjiang 150001, China;

2. Zhejiang Narada Power Source Co., Ltd., Hangzhou, Zhejiang 310013, China)

Abstract: The failure modes of premature capacity loss (PCL) of VRLA battery were introduced. Research trend and development were summarized. Three theories of gel-crystal structure, agglomerate of spheres structure and preventing layer were discussed. Some methods of preventing and recovering from PCL were suggested to improve cycle life.

Key words: premature capacity loss(PCL); positive active mass(PAM); interface; corrosion layer; VRLA battery

电池杂志

BATTERY BIMONTHLY