锂锰扣式电池生产线控制系统设计

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摘要:论述了锂锰扣式电池自动组装生产线控制系统方案的新设计,在系统中采用 PLC 进行控制,触摸屏进行信息输入、参数设置、设备监控画面显示以及故障报警详细信息的显示等。系统中使用了大量的传感器,用于检测生产线的工作状态,该系统具有控制系统故障诊断、机械装置故障报警、气动故障自动监测、次品检测与自动剔除、冲床人身安全自动监测等功能,应用效果很好。

关键词: 锂锰扣式电池; 组装生产线; PLC; 控制系统

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The design of the control system of automatic assembly line

for Li/MnO₂ button batteries

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Abstract: A control system of automatic assemble line for Li/MnO₂ button battery based on PLC was introduced. A touch screen was used in the control system. It was used to input information, set parameters, display process chart and display alarming information. A lot of sensors were used to detect assembly line process, so the control system had the functions of trouble shooting, mechanical trouble alarming, pneumatic system monitoring, defects detecting and rejecting, safety monitoring. Production running indicated that the control system was robust.

Key words: Li/MnO₂ button batteries; assembly line; PLC; control system