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反应堆控制棒新型电磁驱动机构原理实验监控系统

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摘要 为解决反应堆控制棒新型电磁驱动机构工程样机设计中遇到的一些问题,对该机构的原理样机进行了性能实验。该原理样机实验监控系统采用光栅尺测量控制棒的实际位移,可编程控制器(PLC)控制实验台,计算机采集实验数据,计算机与PLC之间通过RS232串口进行通信。实验表明:该实验监控系统性能可靠,精度高,保证了实验的顺利完成。

关键词 [反应堆控制棒](#) [电磁驱动机构](#) [性能实验](#) [监控系统](#)

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Experiment Monitoring System of a New Electromagnet Drive for Nuclear Reactor Control Rod

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Abstract In order to deal with some unsolved problems in the engineering prototype design of a new electromagnet drive device for nuclear reactor control rod, the property experiment in view of principle prototype is carried out. Actual displacement of nuclear reactor control rod is measured by means of raster ruler and the test data is obtained by means of computer. The computer communicates with PLC using RS232 serial port. The experimental results show that the monitoring system have the properties of high reliability and high precision, and ensures the experiment to accomplish successfully.

Key words [nuclear reactor control rod](#) [electromagnet drive device](#) [property experiment](#) [monitoring system](#)

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