

论文

集中供热换热站在线监控系统

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摘要:

该系统基于现场总线技术,采用PID模糊控制,结合自主开发的模块化在线监控软件包,能够实现一次网蒸汽温度、压力,二次网供、回水温度和压力等主要参数的实时在线监控和网络远程监控两大功能,并具有数据存储和分析、报表打印、诊断故障及报警等功能.该系统能够帮助运行管理人员及时准确地了解现场运行工况、调整运行参数,从而能有效提高整个集中供热系统运行的安全性、稳定性和经济性.

关键词: 集中供热 换热站 现场总线 在线监控

On-line supervision system for heat-exchanging stations of a district heating system

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Abstract:

Based on the Field-bus technology and PID fuzzy control technology, the on-line supervising system for the heat-exchanging stations of district heating system was developed. This system can realize the real-time on-line supervising for the main operating parameters of heat-exchanging stations with independently developed on-line supervisory software package, and can also realize data storing and analyzing, failures detecting and alarming either. The main operating parameters include temperature and pressure of primary steam network, temperature and pressure of water supply and back system of secondary network, and so on. This system can effectively help the managers of district heating system to monitor the local operating mode, and regulate major operating parameters. Therefore, the increases of the safety, stability and economy of district heating system can be achieved.

Keywords: district heating system heat-exchanging station Field-bus on-line supervising

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