Design of the Distributed Long Distance Water Supply Control System With Process Field Bus Technology

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ABSTRACT

To meet the need of long distance water supply control system of a city, make full use of the characteristics of opening, reliability and good anti-interference of the PROFIBUS technology, make up the distributed measurement and control network. It realizes the long-distance control of well swarm, intelligent dispatch of water supply and synthetically network of pipes. Adopting distributed control structure, each control station can separate itself from the network and work independently. Being connected by Field Network Bus, they can communicate and deliver information with each other, which can greatly improve the automation and quality of the long distance water supply, realize the intelligent monitor and science management. It has the advantages of convenient operation, good reliability, prompt and accurate supervision and control etc, and has important realistic meaning for saving energy, reducing consume and improving economic performance of water-supply field.

Keywords: Process Field Bus, Distributed Measurement and Control Network, Long-distance Monitor, Network Transmission