

Design of electrical equipment system for pumping station

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Abstract: In the context of increasing water supply demand and requirements for efficient energy management, this study focuses on designing and implementing an automated electrical system to optimize the operation of pumping stations. The objective is to develop a solution integrating advanced sensor and control technologies to reduce energy consumption and enhance operational reliability. The research methodology includes analyzing the current situation, designing a theoretical model, and then conducting experimental deployment at an actual pumping station. The expected results will contribute to improving energy efficiency and sustainable management for the water industry.

Keywords: Automated electrical system, Pump station, Energy optimization, Sensor technology, Automatic control