

# **Design of power supply system for mechanical repair workshop and GANG NAM SON factory in Thai Nguyen**

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**Abstract:** In this study, we focus on designing and optimizing the power supply system at the mechanical repair workshop and the Gang Nam Son factory in Thai Nguyen. With the goal of ensuring energy efficiency and stable power supply, the project combines theory with experimentation to evaluate current solutions and propose necessary changes. The methods used include technical analysis and system simulation. The results of the study are expected to significantly improve power supply quality, minimize power outages, and optimize operational costs for the enterprise.

**Keywords:** power supply, system optimization, mechanical plant, energy, technical analysis