

## The Electrical Power Efficiency and Quality in Industrial Premises<sup>1</sup>

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### Abstract

This study concentrates on two basic problems: i)- Increasing of power efficiency in Industrial premises to reduce the energy needed for product unit without any impact on the production level .

To achieve this goal, lighting system should be operated in a certain condition, capacitor banks for power factor improvement should be installed, and energy losses of distribution transformers should be reduced.

ii)- Power quality in these premises and source of disturbances such as voltage and frequency vibration and flickering, as well as methods to handel these disturbances.

Electrical power efficiency and quality for Textile Company were analyzed. Investigation results have shown that cost of electricity consumption could be reduced, and reliability issues could be increased based on certain technical measures, which were proposed in the research work to be taken into consideration by such industrial premises.

<sup>1</sup> For the paper in Arabic see pages (115-146).

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