## LED Replacement Tubes – Office Areas

LED replacement tubes have recently been installed on a pharmaceutical production site. Some office areas had suffered from several older types of T8 fluorescent fittings overheating causing a fire risk. On investigation it was found that it was the magnetic ballasts that were overheating.

A cost comparison was carried out between replacing the fittings completely, or replacing the conventional discharge tubes with LED tubes which do not require a ballast. It was found to be more cost effective to install LED tubes and carry out a small wiring change on the fitting.



- Approximately 70% reduction in energy costs achieved comparing the 23W LED tube against a 55W T8 fluorescent tube plus ballast load.
- Increased lighting efficacy.
- Reduced maintenance requirements. No starter gear and 50,000 hrs tube life
- Reduced heat gain from fittings
- Removing ballast from circuit greatly reduces the risk of overheating
- Requires small wiring modification to the fitting to remove the ballast
- LED Tubes currently only suitable for T8 fluorescent tube replacement not T5

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