

Everything You Ever Wanted to Know About Group Relamping ...and Maybe More

Group relamping is a proactive maintenance practice which consists of replacing all the lamps in an area at predetermined intervals, before they start burning out on a regular basis.

Spot relamping occurs when lamps fail and are replaced on an as-needed basis.

Group relamping keeps a lighting system functioning at its maximum by replacing all lamps at their economic life. It optimizes energy efficiency and light output, creates labour efficiencies and reduces interruptions to end users of the space.

OPTIMIZE LIGHT OUTPUT

- Light levels are at their peak when a lighting installation is new
- The light output of most metal halide lamps decreases to 40% of initial light output by the end of their rated life
- Group relamping provides brighter, more uniform light because lamps are replaced before fully depreciated.
- The color of light changes over the life of the lamp. Lamp color uniformity is maintained when all lamps are at the same point in their life cycle.

ENERGY EFFICIENCY

- Lumen output diminishes over time due to the consumption of sodium or metal halide salts in the arc tube over lamp life.

- Lamps that remain in place past their economic life consume the same amount of electricity but produce much less light.
- Energy is the largest single cost of lighting. Group relamping reduces energy wasted by under-performing lamps.

MAINTENANCE

- The largest cost component of lighting maintenance is relamping, and the largest cost component of relamping is the cost of labour.
- Labour costs associated with spot relamping are generally 5 times greater than group relamping labour costs.
- Spot relamping is an inefficient use of maintenance staff time and therefore a waste of money.
- Consider the cycle of a single burnout; maintenance staff is contacted, visit the site and determine requirements; retrieve or purchase a replacement lamp, gather equipment to install (do they need a lift?), gain access to the fixture, change the lamp and return equipment.
- A worker may take half an hour or longer to retrieve and install a single lamp. Hours or days later another lamp burns out & the cycle is repeated.
- Group relamping allows planned scheduling of maintenance staff and necessary equipment. Staff

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- work systematically from fixture to fixture – cutting the required time to about 3 minutes per lamp.
- Scheduling a group relamping provides an opportunity to troubleshoot the lighting installation and clean accumulated dirt on fixtures (another source of lumen loss).
 - Scheduled relamping results in no disruption for the users of the space and...
 - Reduces costs by concentrating lamp purchases into fewer, larger orders and...
 - Makes lamp recycling easier and...
 - Reduces the chance of mixing incompatible lamps

WHEN DO I GROUP RELAMP?

- Ideally before lamps start failing on a regular basis, generally at 70% – 80% of rated lamp life (after allowing for burn cycle changes)*

WILL I EVER HAVE TO SPOT RELAMP?

- Sure. There will be some lamps that will burn out prior to the scheduled relamp and may have to be spot relamped. These lamps can be claimed under the manufacturer warranty and such a claim can be easily substantiated

** Burn cycle relates to reductions in lamp life due to shorter 'burn' times per start. For instance a lamp that remains on for 10 hours per start should reach it's rated life where a lamp that remains on for only 2.5 hours per start will experience as much as a 50% reduction in rated lamp life. Another reason to run your HID lights through LightBoss and turn them 'down' not 'off'.*

Want to know more about optimizing your LightBoss controlled lighting system? Please visit our website at www.lightboss.com or call Paul Tate at 1-888-346-3622

