Energy Saving Tips for Processing Plants

Is your plant using too much energy? Here are some **reduction, re-use, and recycling** tips for you to save 10, 20 or even 30% on your energy cost:
1. Establish a three-level energy management system for the plant: production shift; clean-up/maintenance shift; weekends/down-days. Establish Standard Operating Procedures for each level/area/process.
2. Educate employees on their role in energy use and conservation. Assign energy management tasks to supervisory personnel and department heads.
3. Turn-off lights, computers, monitors at nights and on weekends. Use motion sensors in areas where lights are generally left on most of the time.
4. Install timers, level sensors, photo cells, and other controls for automatic operation and/or shut-off of equipment and systems (i.e., ventilation, cooling and heating etc.).
5. Insulate and insulate... Seal-off unused areas to reduce heating and cooling costs.
6. As burn-outs occur, replace incandescent lamps and T12 fluorescent lamps with T8s and T5s. Disconnect ballasts from fixtures in which the lamps removed.
7. Use LED (Light Emitting Diode) lighting and signage (EXIT signs, etc.)
8. Install a KW demand monitor to cycle non-critical loads during peak hours of operation. Make ice during off-peak hours of operation to reduce demand at peak hours
9. Turn-off (or initiate a low pressure setting) air compressors during the weekends and after-hours operation. Repair air leaks. Use smaller units for after-hour uses.
10. Evaluate motor-current-running chart to verify that all motors are running 80-90% loaded; replace the oversized motors with smaller HP and more energy-efficient units.
11. Perform routine and regular maintenance on power equipment and facilities. Check pipes and valves for hot water and steam leaks. Use heat exchangers where appropriate.
12. When replacing power equipment, consider energy-efficient models. When replacing non-power equipment consider improved designs to reduce non-productive loads.

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