Frozen yogurt shops energy usage/tips

Energy use at a glance

- Commercial frozen yogurt machines, also known as soft-serve machines, use a lot of energy. One unit alone may draw 2.5 kilowatts (kW) to 6 kW of electricity, depending on features; number of compressors; cooling system (air cooled versus water cooled); and efficiency of the condenser, fan motor and beater motor for blending product in the freezing cylinder.
- Frozen yogurt machines emit excess heat ranging from 7,200 British thermal units (Btu) to 12,000 Btu per machine. This in turn increases the cooling load in the surrounding space – and air-conditioning costs for the store.

Tips and strategies to help you save

- Two methods for cooling the motors in a soft-serve machine are:
  - Air-cooled with a fan: Exhaust heat from frozen yogurt machines via duct away from adjoining machines and outside the shop.
  - Water cooled (if store's ventilation can't effectively exhaust hot air): Another option to consider, instead of the system that recycles regular water and increases your water costs, is installing a water cooling system that uses propylene glycol (antifreeze) in a closed loop chiller located outside.
  - Clean condensers on air-cooled machines at least once a month to prevent dust, lint and debris from building up.
- Consider staggering start-up every 15 minutes of one or two frozen yogurt machines at a time to reduce electricity demand (kW).

Actual savings may vary and will depend on various factors, including geographic location, weather conditions, equipment installed, usage rates and similar factors.