

BROILERS

POSSIBLY THE MOST ENERGY HUNGRY APPLIANCE IN YOUR KITCHEN...

GREEN THUMB QUICK TIPS:

- One broiler may use more energy than 6 fryers.
- Turn it off when you aren't using it: if you can eliminate three hours a day of standby time, you'll save up to \$600 annually.
- Do you need the entire broiler, all of the time? For every hour of the day that you can turn off half the broiler, you'll save up to \$100 annually.



BROILERS (Under-Fired) 101:

Broilers are composed of a suspended metal grill with heat applied from either above or below. Depending on size and design, broilers are used for anything from melting cheese to cranking out large cuts of meat in vast quantities.

By design, broilers are open to the kitchen and radiate a great deal of heat into the room. They tend to have high energy use and low efficiency, and represent one of the most expensive appliances to operate in a commercial kitchen. In addition, broiling—especially under-fired broiling on a charbroiler—produces more smoke than comparable cooking methods by other appliances. However, the flavor and appearance of broiled food is distinctive, and is often the selling point on the menu.

Broilers don't have thermostats, so they use energy at the same high rate all day long-or until you manually adjust them. An average broiler uses 6-10 times the energy of an idling fryer. And it's the same rate whether the broiler is cooking 25 hamburgers, one chicken breast, or is just "standing by." In contrast, a fryer or oven consume their full rated input for a few minutes during preheat, and then their thermostats turn the energy down or off to hold a set temperature and the appliance only consumes a fraction of the energy it would at full input.

Your energy costs for a broiler depend on which size and type you operate (under-fired charbroilers are generally the biggest energy users) and whether you bother to turn it off or down during slow periods (generally worth your time for this energy-intensive appliance.)

The 3'- 4' under-fired gas broiler is the industry standard, but there are also a number of larger broilers (ranging up to 12 feet long) and several different types of over-fired broilers, which arrange the heat source above the food and are often mounted on the backshelf above the range. In general, all the most powerful broilers are gas fired, and food warmer/cheesemelter over-fired broilers may be gas or electric. Typical inputs for a gas under-fired broiler are 80,000-120,000 Btu per hour.

The FSTC has tested broilers and has reports pending on several models. You can get a customized look at what appliance energy is costing you in your operation by contacting your PG&E Marketing Representative. If you want to look at actual performance figures from our laboratory trials or our Production Test Kitchen monitoring, check out the list of published Reports for a title that matches your interests, or browse through the Abstracts for a more detailed summary