

Steam Kettles

● **Lower the lid on the steam kettle while you're simmering: cut energy use by up to 50%.**

The steam kettle uses a steam-filled jacket around a stainless steel vessel to reproduce, on a larger scale, the stock pot on the back burner of your stove. There is often a hinged lid, and the operator can choose from automatic filling and mixing attachments. Trunnion mounting or a dairy-style valve allow for quick unloading and cleaning. Capacities range from ten gallons to over 150 gallons: the steam kettle is targeted for high-volume operations.



Your steam kettle may have a rating of 30,000-125,000 Btu/hour or 6kW-36kW, but in normal operation it probably uses about half that much energy as it cycles on and off to maintain a constant temperature.

Kettles are typically turned on and off with each use, and thus don't "stand by" as other appliances do. One exception is when a kettle is used for continuous production such as steaming, boiling bagels, or as a hot-water bath for cook-chill operations. In these situations a steam kettle may spend a large portion of its operating time standing by, holding water at a simmer or a boil. In general, energy use when simmering or boiling water can be reduced dramatically (i.e. up to 50%) by using a lid on the kettle. And of course, the biggest possible savings is to identify long idle periods and turn the appliance down, or off altogether.

The FSTC has developed a standard method for testing steam kettles, and has reports forthcoming. 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.