



Image courtesy of AccuTemp.

The commercial griddle is a mainstay of the foodservice industry and found in most commercial kitchens. It is a flat surface heated at temperatures from 200 °F to 400 °F and is used for cooking, searing meats, crisping or browning foods, and warming or toasting breads. Electric griddles cook faster than gas-fired griddles, save energy, and improve the working environment.

HOW IT WORKS

Typical components of a commercial griddle include heating elements, the flat surface or plate, grease trough, and splash guard. There are three types of commercial griddles: single-sided; double-sided, also called clamshell; and steam. Steam griddles produce steam in a vacuum chamber underneath the cooking surface.

The griddle cooks food by conducting heat directly from the metal plate to the food. Electric griddles, with elements embedded in or attached to the plate, and steam griddles, with the steam underneath the surface, deliver consistent heat across the surface. Gas-fired griddles can form hot and cold zones and result in uneven cooking.

Typically, the griddle is turned on when the kitchen opens, turned off when it closes, and left on all day so it is ready to use when needed. For this reason, the griddle is one of the largest energy consumers in a commercial kitchen, so operating efficiency matters.

DID YOU KNOW?

In one analysis, a 36-inch single-sided electric griddle uses 48 MMBtu less energy annually than a gas griddle.

APPLICATIONS

Electric griddles can be used in any commercial food-preparation application:

- Restaurants
- Fast food restaurants
- Hotels
- Schools and cafeterias
- Commercial or demonstration kitchens
- Catering venues

BENEFITS

Faster pre-heating and recovery time. Electric griddles are more efficient and can provide faster throughput than their gas counterparts. Heat-up and recovery time is shorter because heating elements are embedded in or attached to the plates.

Consistent cooking, better quality. Electric griddles deliver more even cooking temperatures on the plate surface, delivering higher-quality food products.

More comfortable workplace. Gas griddles cook with open flames, adding waste heat to an already hot and confined space. Electric griddles remove gas combustion from the kitchen.

Less maintenance. Electric griddles have fewer parts than gas griddles, and do not require scheduled maintenance, for example, cleaning of flues.

Secondary energy savings. In addition to using energy more efficiently, commercial electric griddles can reduce the air-conditioning load in the kitchen because they do not rely on an open flame. Less energy used means money saved. In one analysis, annual cooling savings amount to 1,226kWh.

Reduced emissions. Electric griddles reduce the release of volatile organic compounds.

LIMITATIONS

Lack of adequate electrical service. The biggest barrier to electric griddles is a lack of adequate electricity in the kitchen to power the equipment. The cost of providing adequate power depends on outlet, wiring, and breaker box configuration, and proximity of power to the kitchen.

Higher capital cost. Many electric griddles typically cost more upfront than gas griddles, but their superior performance and energy savings make them an attractive option in many applications, and an important consideration for purchasing decision-makers.

Customer perception. Some customers have misconceptions about cooking with electricity versus gas. Customers should take into consideration all costs and factors, including purchase price, energy costs, efficiency, maintenance, and even employee retention. Employees prefer a cooler environment and have left a job due to excessive heat in the work area. Often, equipment is purchased with like replacing like. Businesses may also be limited by corporate policy, brand loyalty, or even salesperson or sales rep loyalty.

More time to procure. Due to lower demand for electric griddles, dealers may stock more gas griddles than electric griddles.