



Large fryers are commonly found in commercial kitchens where food is fried. Natural gas fryers lead this market segment. Electric fryers are not new technologies; however, they can improve the cooking process, product throughput and quality, and workplace environment.

HOW IT WORKS

The three most common types of commercial fryers are open pot, flat bottom, and pressure fryers. Open pot is the most common; the user submerges a basket of food into a vat of hot oil. Typically, fryers are turned on when the kitchen opens and turned off when it closes. Although they may sit idle for hours, fryers are left on so the oil stays hot and ready to use when needed. Under these circumstances, electric fryers—with their heating elements submerged in oil—are safer and more energy efficient when compared to gas fryers, especially those that use open flame to heat the oil.

DID YOU KNOW?

One size and type of fryer does not meet all cooking needs. Different foods, such as donuts, fish, funnel cakes, and french fries, may require different fryers.

APPLICATIONS

Commercial electric fryers can be used anywhere food is cooked for commercial purposes:

- Restaurants
- Hotels
- Cafeteria
- Retail
- Stadium

BENEFITS

Faster pre-heating and recovery time. Electric fryers are more efficient and can provide faster throughput than their gas counterparts because of their design, with heating elements submerged in the oil.

Secondary energy savings. In addition to using energy more efficiently, commercial electric fryers can reduce the need for more air-conditioning in the kitchen because they don't have a combustion flue exhaust. Less energy used means money saved.

Oil savings. The oil degrades faster in a gas fryer than in an electric fryer. As a result, the electric fryer delivers oil savings for the same quantity of food.

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

Reduced emissions. Electric fryers reduce the release of volatile organic compounds and carbon monoxide into the working environment, resulting in lower ventilation costs.

Lower maintenance. An electric fryer needs less maintenance while gas fryer burners may require more frequent attention due to issues such as burner clogging, which lead to higher maintenance expense.

Ease of cleaning. Electric elements on a fryer swing upwards making them easier to clean, while gas fryer require the cleaner to go around the tubes and heat exchangers.

LIMITATIONS

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

Higher capital cost. Commercial electric fryers may cost more upfront than gas fryers, but their throughput and workplace comfort benefits provide value for purchasing decision-makers.

Customer perception. Some customers prefer to cook with gas—or think they do. They may not have experience with electricity, so they shop for gas because it's what they know. They may also have brand loyalty, or be limited by corporate policy that dictates the type of equipment purchased for the kitchen.

More time to procure. Due to lower demand for electric fryers, dealers may not stock the equipment, therefore it may take longer to buy it, creating a cycle that further hinders adoption.