

Deep Fat Fryers

Fires in deep fat fryers cause extensive damage.

The fat used in deep fat fryers is normally heated to about 360° and has a self-ignition temperature of approximately 620° Fahrenheit. After the fat has been in use for several days the self-ignition temperature is lowered by 50° or more. The older the grease, the greater the hazard. When a temperature controller malfunctions, the temperature of the fat can readily increase to the self-ignition point and the vapors will catch fire from the excess temperature. All of the fat in the fryer, not just the surface, will be at the self-ignition point.

If water is applied improperly to a fire in a deep fat fryer, boil-over will occur, which can result in serious injury to personnel, and can spread the fire to the outside of the hood area. Because of the intensity of fires in deep fat fryers and the danger to personnel, it is highly advisable to take all practical precautions to prevent a fire from occurring.

Deep fat fryers must be kept free of heavy grease deposits.

Deep fat fryers must be positioned below cooking exhaust hoods. Grease and residue deposits should be continually cleaned from the surface areas of the fryers, the surrounding floor and all control devices on the equipment.

Equipment maintenance

Modern UL listed fryers should be used. Frequent cleaning and preventive maintenance is essential. Old fryers that have not been used for long periods of time should not be used until the entire unit has been thoroughly checked by an authorized dealer.

Excess temperature limit control for all deep fat fryers.

A deep fat fryer should never be operated without a temperature controller. In addition to the usual temperature controller which turns the heat source on and off, a fail-safe type excess temperature limit control should be provided. This limit control will shut off the heat source and require a manual reset if the fat reaches an unsafe temperature. This control will also shut off the heat source and require manual reset if the heat sensing element in the fat becomes inoperative. This is the fail-safe feature. The limit control is inexpensive and is easily installed with either gas or electrically heated fryers.

Automatic extinguishing protection is needed.

Automatic extinguishing systems are essential for the protection of deep fat fryers because of the intensity of fat fires and because of the inaccessibility of the areas above the filters and in the exhaust ducts.

The automatic fire extinguishing system should protect the area above the hood filters, the exhaust ducts and all cooking surfaces under the filters, including all deep fat fryers. Proper positioning of the nozzles over the fryers is of the utmost importance.

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Automatic fire extinguishing systems should meet UL 300 standards. Systems not meeting these standards should be upgraded.

Automatic Extinguishing Systems should be serviced by a qualified service contractor at least every 6 months. The system should be tagged to indicate the date of service.

Portable fire extinguishers

A Class K Fire Extinguisher should also be mounted in the kitchen area in an easily accessible location.

The loss prevention information and advice presented in this brochure are intended only to advise our insureds and their managers of a variety of methods and strategies based on generally accepted safe practices, for controlling potentially loss producing situations commonly occurring in business premises and/or operations. They are not intended to warrant that all potential hazards or conditions have been evaluated or can be controlled. They are not intended as an offer to write insurance coverage for such conditions or exposures, or to simply that Great American Insurance Company will write such coverage. The liability of Great American Insurance Company is limited to the specific terms, limits and conditions of the insurance policies issued.
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