



Uniquely Keating - we've perfected the process of frying foods at lower temperatures

It is for good reason we have specifically designed our fryers to be low temperature frying specialists -

¹ Jacobus H. Van't Hoff, first recipient of the Noble Prize in Chemistry in 1901, states:

"It is everyday experience that chemical reactions are accelerated by increased temperature. The rate of many reactions at room temperature is approximately doubled for every 10°C increase in temperature."*

*Pauling, Linus — General Chemistry, 1970 (PP 406, 564)

Frying is a process that uses 1 food to cook another

Shortening starts to break down from the effects of temperature at 300°F. For every 10°C or (18°F) that you increase the temperature, you double the rate of the shortening breakdown. Frying at lower temperatures will certainly prolong the life of the shortening:

There are so many benefits to frying at lower temperatures, it's what makes frying in a Keating Instant Recovery® Fryer so unique . . .

1. ¹ We recommend frying between **325° - 335 F**. Yes, really. Our fryers will recover to the set temperature before your product has finished cooking.

Example - it takes only 2 to 2 1/2 minutes at **312°F** to achieve a batch of perfectly crisp, golden potato chips in a Keating fryer (using Great #1 Burbank Russett Washington State Potatoes). When oil is too hot, it will over brown the outside without properly cooking the inside of any fried food, resulting in a poor product. **Frying at lower temperatures saves the quality of your food, and your oil.**

2. We've developed (and patented) a system of burners and large heat transfer tubes to ensure fast recovery and accurate temperature in the cooking zone. It enables the fryer to recover the set temperature before the product is finished cooking. This system creates the "cold zone" where crumbs and food particles collect without scorching.

By avoiding variations in temperature, foods absorb less of the oil - the longer the frying period, the greater the oil absorption (french fries become 10% oil or more by the end of the cooking cycle).

3. The cold zone in a Keating fryer is the largest per frying capacity of any competitive fryer. If we prevent crumbs and particles from scorching, it not only saves the flavor of the oil, but carbonization (the breakdown and blackening of the oil) is reduced. Because the sediment doesn't burn in the cold zone, it can be easily cleaned from the bottom of the fry pot. **You benefit by not having to change oil as often, and protects the flavor of the fried foods.**

Metals such as iron, copper and brass adversely react with oil and increase the speed of breakdown. That's why Keating equipment is all stainless steel constructed, from the fryer vessel to the cabinet.

Recommended Frying Practices . . .

1. Control and maintain a steady temperature. For our fryers, we recommend frying between 325°-335°F. Avoid using high heat (temperatures over 350°F).
2. Keep crumbs/particles/debris out of the frying area.
3. Lower the temperature between periods of use (200°F)
4. Keep salt or seasonings away from the fry pot. Avoid frying pre-salted foods.
5. Control moisture. Oil and water do not mix, and water will cause the oil to release free fatty acids - this reaction increases the acidity of the oil and it may cause the fried product to have a tainted or acidic flavor.
6. Keep fryer unit covered when not in use to prevent oxidation and contamination of the oil.
7. Filter regularly as needed - we recommend filtering daily.

The benefits of filtering . . .

Small particles of food debris, as well as chemical residues and microscopic impurities from frying foods contribute to taste transfer between products, and also to the shortening. These insoluble impurities are suspended in the oil, and can easily be removed through filtering. **Filtering can save up to 30% on oil costs.**

Keating has 3 filtering options to quickly, safely and easily condition the oil, remove free fatty acids, and extend oil life - Safe & Easy® Under Fryer, Safe & Easy® Central and our Portable Filter. All 3 systems purify oil utilizing filter paper and our Acidox Powder (a blend of specially selected diatomaceous silica and 2 synthetic silicates: magnesium silicate improves color and calcium silicate removes free fatty acids).

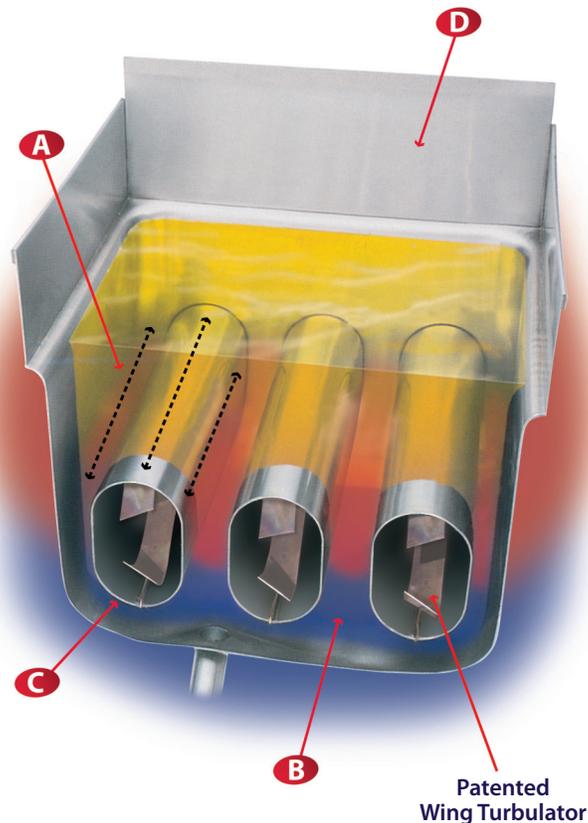
The heating efficiency of our fryers results in frying at lower temperatures - uniquely Keating

A Keating Instant Recovery® - because of the large surface area of the heat transfer tubes, our fryers maximize the heat transferred to the frying oil, and recover the temperature instantly back into the cooking zone. Cooking at lower temperatures and controlling the variations in temperature means the food absorbs less of the oil.

Heat Transfer Tubes measure 3" in width x 5" high, and run the complete length of the fry pot.

C Polished Heat Transfer Tubes - large, highly polished heat transfer tubes contain our patented wing turbulators. The turbulator forces the heat against the surface of the tube to instantly heat the oil. As food is added and cooks, the temperature is recovered quickly before the end of the cooking cycle, allowing you to cook at lower temperatures.

B True Cold Zone - we boast the largest cold zone per frying capacity of any competitive fryer, gas and electric - 27% of the frying vessel in our 14" model. Shortening is heated through the center of the fry pot, exposing more heated surface to the shortening and creating the large cold zone below. Crumbs are captured in the cold zone at the bottom of the pot to prevent them from scorching. The sediment can then be easily cleaned, and carbonization of the oil is reduced - protecting the flavor of the oil.



D Stainless Steel - metals such as steel, iron and aluminum cause a chemical breakdown in the oil on contact. All Keating fryer vessels and heating elements are stainless steel, highly polished to a #7 mirror bright finish. The smoother the finish, the less carbon buildup and the easier it is to keep clean.



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