



# ENERGY STAR® Program Requirements for Commercial Fryers

## Eligibility Criteria

Below is the product specification (Version 1.0) for ENERGY STAR qualified commercial fryers. A product must meet all of the identified criteria if it is to be labeled as ENERGY STAR by its manufacturer.

- 1) **Definitions:** Below is a brief description of a commercial fryer and other terms as relevant to ENERGY STAR.
  - A. **Commercial Open, Deep-Fat Fryer:** An appliance, including a cooking vessel, in which oil is placed to such a depth that the cooking food is essentially supported by displacement of the cooking fluid rather than by the bottom of the vessel. Heat is delivered to the cooking fluid by means of an immersed electric element or band-wrapped vessel (electric fryers), or by heat transfer from gas burners through either the walls of the fryer or through tubes passing through the cooking fluid (gas fryers).
  - B. **Cooking Energy Efficiency:** The quantity of energy input to the food product (e.g., French fries) during the cooking process; expressed as a percentage of the quantity of energy input to the fryer during the heavy-, medium-, and light-load tests. For purposes of this specification, heavy-load will be used as a measurement of energy efficiency.
  - C. **Heavy (French fry) Load Cooking:** A 3-pound load of frozen shoestring potatoes, divided evenly into 1½-lb loads and placed in two baskets for cooking.
  - D. **Idle Energy Rate:** The rate of fryer energy consumption while it is maintaining or holding the frying medium at the thermostat(s) set point. For purposes of this specification, idle energy rate is measured by Btu/h (gas) or watts (electric).
- 2) **Qualifying Products:** Any commercial fryer that meets the definition in Section 1A is eligible for the ENERGY STAR.
- 3) **Energy-Efficiency Specifications for Qualifying Products:** Only those products listed in Section 2 that meet the following criteria may qualify as ENERGY STAR:

Energy Efficiency Requirements for Open Deep-Fat Gas Fryers	
Heavy Load (French fry) Cooking Energy Efficiency	≥ 50%
Idle Energy Rate	≤ 9,000 Btu/hr*

\*Based on 15-inch fryer

Energy Efficiency Requirements for Open Deep-Fat Electric Fryers	
Heavy Load (French fry) Cooking Energy Efficiency	≥ 80%
Idle Energy Rate	≤ 1000 watts*

\*Based on 15-inch fryer

- 4) Test Criteria: Manufacturers are required to perform tests and self-certify those product models that meet the ENERGY STAR guidelines. The test results must be reported to EPA using the Commercial Fryer Qualifying Product Information Form.

In performing these tests, partner agrees to measure a model's cooking energy-efficiency and idle rate using ASTM Standard F1361-99, *Test Method for the Performance of Open Deep Fat Fryers*.

- 5) Effective Date: The date that manufacturers may begin to qualify products as ENERGY STAR will be defined as the *effective date* of the agreement. The ENERGY STAR Specification for Commercial Fryers is effective **August 15, 2003**.

- 6) Future Specification Revisions: ENERGY STAR reserves the right to change the specification should technological and/or market changes affect its usefulness to consumers, industry, or the environment. In keeping with current policy, revisions to the specification are arrived at through industry discussions. **Please note that ENERGY STAR qualification is not automatically granted for the life of the product model.** To carry the ENERGY STAR label, a product model must meet the ENERGY STAR specification in effect on the model's date of manufacture.