



Standard Test Method for Performance of Braising Pans¹

This standard is issued under the fixed designation F 1786; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This test method evaluates the energy consumption and cooking performance of braising pans. The food service operator can use this evaluation to select a braising pan and understand its energy consumption and performance characteristics.

NOTE 1—Braising pans also are commonly referred to as tilting skillets. This test method uses the term *braising pan* in accordance with Specification F 1047.

1.2 This test method is applicable to self-contained gas or electric braising pans. The braising pan can be evaluated with respect to the following, where applicable:

1.2.1 Maximum energy input rate (10.2).

1.2.2 Capacity (10.3).

1.2.3 Heatup energy efficiency and energy rate (10.4).

1.2.4 Production capacity (10.4).

1.2.5 Simmer energy rate (10.5).

1.2.6 Surface temperature uniformity, optional, (10.6).

1.2.7 Pilot energy rate (10.7).

1.3 The values stated in inch-pound units are to be regarded as standard. The SI units given in parentheses are for information only.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*²

F 1047 Specification for Frying and Braising Pans, Tilting Type

F 1275 Test Methods for the Performance of Griddles

2.2 *ANSI Standard:*

ANSI Z83.14 Gas Food Service Equipment—Counter Appliances²

2.3 *ASHRAE Documents:*³

ASHRAE Guideline 2-1986 (RA90) Engineering Analysis of Experimental Data

ASHRAE *Handbook of Fundamentals*, “Thermodynamic Properties of Water at Saturation,” Chapter 6, Table 2, 1989

3. Terminology

3.1 *Definitions:*

3.1.1 *braising pan, n*—an appliance wherein heat is imparted to food in a shallow-sided flat-bottomed vessel by conduction through the heated pan bottom.

3.1.2 *control electric energy, n*—the electric energy, for example, for controls, fans, consumed by braising pans whose primary fuel source is not electricity, that is, gas. Control electric energy is measured and reported separately from primary fuel energy so that their respective fuel prices can be applied to estimate energy costs.

3.1.3 *fill-to-spill capacity, n*—the maximum food capacity (gal) of the braising pan as determined by filling to the point of overflow.

3.1.4 *heatup energy, n*—energy consumed by the braising pan as it is used to heat the specified food product to a specified temperature.

3.1.5 *heatup energy efficiency, n*—a quantity of energy imparted to the specified food product, expressed as a percentage of energy consumed by the braising pan during the heatup event.

3.1.6 *heatup energy rate, n*—the average rate of energy consumption (kBtu/h or kW) during the heatup energy efficiency test.

3.1.7 *maximum energy input rate, n*—the peak rate (kBtu/h or kW) at which a braising pan consumes energy, as measured in this test method.

3.1.8 *nameplate energy input rate, n*—the peak rate (kBtu/h or kW) at which a braising pan consumes energy, as stated by the manufacturer.

¹ This test method is under the jurisdiction of ASTM Committee F26 on Food Service Equipment and is the direct responsibility of Subcommittee F26.06 on Productivity and Energy Protocol.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. (ASHRAE), 1791 Tullie Circle, NE, Atlanta, GA 30329.

