



Food Service Technology Center Appliance Test Summary Report

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California consumers are not obligated to purchase any full service or other service not funded by the program.
This program is funded by the California utility rate payers under the auspices of the California Public Utilities Commission.

Manufacturer	Pitco Frialator, Inc.
Model	VF35
Appliance	14-inch Fryer - Gas

Report Number	501310050
Report Date	Sept., 2010
Tested By	D. Cowen

Purpose of Testing

This testing determined the energy input rate, preheat time and energy, idle energy rate and heavy-load cooking-energy efficiency of the fryer by applying the ASTM F1361-07 Standard Test Method.

Energy Input Rate

Heating Value	1038
Rated Energy Input Rate (Btu/h)	70,000
Measured Energy Input Rate (Btu/h)	69,367
Difference (%)	0.90

Preheat to 350°F

Heating Value	1038
Duration (min)	13.6
Gas Energy Consumption (Btu)	9,456
Preheat Rate (°F/min)	20.3

Idle at 350°F

Heating Value	1038
Gas Idle Energy Rate (Btu/h)	7,349

Heavy-Load Cooking Energy Efficiency ^a

Heating Value	1038
Food Product	French Fries
Load Size (lb)	3.00
Cook Time (min)	2.61
Average Recovery Time (sec)	27.6
Gas Cooking Energy Rate (Btu/h)	67,900
Energy to Food (Btu/lb)	573
Energy to Appliance (Btu/lb)	1,158
Cooking-Energy Efficiency (%)	50 ± 0.4
Production Capacity (lb/hr)	58.7 ± 1.4

^a based on a minimum of three test replicates.



Pitco VF35 Gas fryer.

Pitco Frialator, Inc.

P.O. Box 501
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www.pitco.com

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Heavy-Load Test Data

	Test #1	Test #2	Test #3
Measured Values			
Heating Value	1038	1038	1038
Gas Energy Consumption (Btu)	17,268	17,416	17,416
Total Energy (Btu)	17,268	17,416	17,416
Cook Time (min)	2.58	2.67	2.58
Total Test Time (min)	15.18	15.42	15.44
Weight Loss (%)	29.50	30.20	29.80
Initial Weight (lb)	15.000	15.000	15.000
Final Weight (lb)	10.575	10.469	10.527
Initial Moisture Content (%)	66.6	66.6	66.6
Final Moisture Content (%)	46.5	46.2	46.5
Initial Temperature (°F)	0	0	0
Final Temperature (°F)	212	212	212
Calculated Values			
Initial Weight of Water (lb)	9.990	9.990	9.990
Final Weight of Water (lb)	4.917	4.837	4.895
Sensible (Btu)	2,210	2,210	2,210
Latent – Heat of Fusion (Btu)	1,439	1,439	1,439
Latent – Heat of Vaporization (Btu)	4,921	4,998	4,942
Total Energy to Food (Btu)	8,570	8,647	8,591
Energy To Food (Btu/lb)	571	576	573
Total Energy to Fryer (Btu)	17,268	17,416	17,416
Energy to Fryer (Btu/lb)	1,151	1,161	1,161
Cooking-Energy Efficiency (%)	49.6	49.6	49.3
Gas Cooking Energy Rate (Btu/h)	68,253	67,767	67,679
Production Rate (lb/h)	59.3	58.4	58.3
Average Recovery Time (sec)	27.6	24.6	30.6

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