



Food Service Technology Center Appliance Test Summary Report

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Manufacturer	Perfect Fry Company
Model	PFC5700
Appliance	Self-Contained Ventless Fryer - Electric

Report Number	5012.09.14
Report Date	June, 2009
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

Test Voltage (V)	240
Rated Energy Input Rate (kW)	5.70
Measured Energy Input Rate (kW)	6.52
Difference (%)	14.3

Preheat to 350°F

Duration (min)	5.00
Energy Consumption (Wh)	520
Preheat Rate (°F/min)	53.0

Idle at 350°F

Idle Energy Rate (kW)	0.53
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Heavy-Load Cooking Energy Efficiency ^a

Food Product	French Fries
Load Size (lb)	1.50
Cook Time (min)	2.83
Average Recovery Time (sec)	17.4
Cooking Energy Rate (kW)	6.00
Energy to Food (Btu/lb)	577
Energy to Appliance (Btu/lb)	710
Cooking-Energy Efficiency (%)	81.2 ± 2.7
Production Capacity (lb/hr)	28.8 ± 0.6

^a based on a minimum of three test replicates.



Perfect Fry PFC5700 fryer.

Perfect Fry Company

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Calgary, AB, Canada T2V 2X4
www.perfectfry.com

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Heavy-Load Test Data

	Test #1	Test #2	Test #3
Measured Values			
Test Voltage (V)	240	240	240
Energy Consumption (Wh)	1,580	1,540	1,560
Total Energy (Btu)	5,393	5,256	5,324
Cook Time (min)	2.83	2.83	2.83
Total Test Time (min)	15.75	15.48	15.60
Weight Loss (%)	30.10	30.00	29.70
Initial Weight (lb)	7.500	7.500	7.500
Final Weight (lb)	5.245	5.250	5.275
Initial Moisture Content (%)	69.9	69.9	69.9
Final Moisture Content (%)	51.7	52.2	50.3
Initial Temperature (°F)	0	0	0
Final Temperature (°F)	212	212	212
Calculated Values			
Initial Weight of Water (lb)	5.243	5.243	5.243
Final Weight of Water (lb)	2.712	2.741	2.653
Sensible (Btu)	1,105	1,105	1,105
Latent – Heat of Fusion (Btu)	755	755	755
Latent – Heat of Vaporization (Btu)	2,455	2,428	2,512
Total Energy to Food (Btu)	4,315	4,288	4,372
Energy To Food (Btu/lb)	575	572	583
Total Energy to Fryer (Btu)	5,393	5,256	5,324
Energy to Fryer (Btu/lb)	719	701	710
Cooking-Energy Efficiency (%)	80.0	81.6	82.1
Electric Energy Rate (kW)	6.02	5.97	6.00
Production Rate (lb/h)	28.6	29.1	28.8
Average Recovery Time (sec)	19.2	16.2	17.4

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