



Food Service Technology Center Appliance Test Summary Report

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This program is funded by the California utility rate payers under the auspices of the California Public Utilities Commission.

Manufacturer	Henny Penny
Model	OFE-321 Split Vat
Appliance	14-inch Open Deep Fat Fryer - Electric

Report Number	5012.08.31
Test Date	July, 2008
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)	208
Rated Energy Input Rate (kW)	14.0
Measured Energy Input Rate (kW)	14.3
Difference (%)	2.1

Preheat to 350°F

Voltage (V)	208
Duration (min)	8.25
Energy Consumption (kWh)	1.80
Preheat Rate (°F/min)	32.5

Idle at 350°F

Voltage (V)	208
Idle Energy Rate (kW)	0.70

Heavy-Load Cooking Energy Efficiency ^a

Voltage (V)	208
Food Product	French Fries
Load Size (lb)	3.00
Cook Time (min)	2.25
Average Recovery Time (sec)	18
Cooking Energy Rate (kW)	14.1
Energy to Food (Btu/lb)	558
Energy to Appliance (Btu/lb)	683
Cooking-Energy Efficiency (%)	81.7 ± 2.1
Production Capacity (lb/hr)	70.5 ± 2.3

^a based on a minimum of three test replicates.



Henny Penny OFE-321 split vat electric fryer.

Henny Penny Corporation

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Heavy-Load Test Data

	Test #1	Test #2	Test #3
Measured Values			
Test Voltage (V)	208	208	208
Energy Consumption (Wh)	3,030	3,000	2,970
Total Energy (Btu)	10,341	10,239	10,137
Cook Time (min)	2.25	2.25	2.25
Total Test Time (min)	12.91	12.79	12.58
Weight Loss (%)	29.50	29.40	29.00
Initial Weight (lb)	15.000	15.000	15.000
Final Weight (lb)	10.581	10.597	10.655
Initial Moisture Content (%)	69.8	69.8	69.8
Final Moisture Content (%)	53.2	52.6	54.7
Initial Temperature (°F)	0	0	0
Final Temperature (°F)	212	212	212
Calculated Values			
Initial Weight of Water (lb)	10.470	10.470	10.470
Final Weight of Water (lb)	5.629	5.574	5.828
Sensible (Btu)	2,210	2,210	2,210
Latent – Heat of Fusion (Btu)	1,508	1,508	1,508
Latent – Heat of Vaporization (Btu)	4,696	4,749	4,503
Total Energy to Food (Btu)	8,414	8,467	8,221
Energy To Food (Btu/lb)	561	564	548
Total Energy to Fryer (Btu)	10,341	10,239	10,137
Energy to Fryer (Btu/lb)	689	683	676
Cooking-Energy Efficiency (%)	81.4	82.7	81.1
Electric Energy Rate (kW)	14.1	14.1	14.2
Production Rate (lb/h)	69.7	70.4	71.5
Average Recovery Time (sec)	19.8	18.6	16.2

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