



Food Service Technology Center Appliance Test Summary Report

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Manufacturer	AutoFry
Model	MTI 5
Appliance	Self Contained, Ventless Fryer - Electric

Report Number	5012.09.45
Report Date	Nov., 2009
Tested By	K. Sham

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
Rate Energy Input Rate (kW)	4.8
Measured Energy Input Rate (kW)	4.57
Difference (%)	4.77

Preheat to 350°F

Duration (min)	11.42
Energy Consumption (Wh)	870
Preheat Rate (°F/min)	24.1

Idle at 350°F

Idle Energy Rate (kW)	640
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Heavy-Load Cooking Energy Efficiency ^a

Food Product	French Fries
Load Size (lb)	1.50
Cook Time (min)	2.92
Average Recovery Time (sec)	51.8
Cooking Energy Rate (kW)	4.66
Energy to Food (Btu/lb)	579
Energy to Appliance (Btu/lb)	669
Cooking-Energy Efficiency (%)	86.6 ± 5.4
Production Capacity (lb/hr)	23.8 ± 0.2

^a based on a minimum of three test replicates.



AutoFry MTI 5 Self Contained Fryer

AutoFry

25567 Seaboard Lane
Hayward, CA 94545
www.AutoFry.com

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Heavy-Load Test Data

	Test #1	Test #2	Test #3
Measured Values			
Test Voltage	240	240	240
Energy Consumption (Wh)	1470	1470	1470
Total Energy (Btu)	5,017	5,017	5,017
Cook Time (min)	2.92	2.92	2.92
Total Test Time (min)	18.95	18.86	18.93
Weight Loss (%)	30.90	30.50	30.60
Initial Weight (lb)	7.500	7.500	7.500
Final Weight (lb)	5.191	5.209	5.207
Initial Moisture Content (%)	65.2	65.2	65.2
Final Moisture Content (%)	46.3	45.5	45.8
Initial Temperature (°F)	0	0	0
Final Temperature (°F)	212	212	212
Calculated Values			
Initial Weight of Water (lb)	4.890	4.890	4.890
Final Weight of Water (lb)	2.403	2.370	2.385
Sensible (Btu)	1,105	1,105	1,105
Latent – Heat of Fusion (Btu)	704	704	704
Latent – Heat of Vaporization (Btu)	2,412	2,444	2,430
Total Energy to Food (Btu)	4,221	4,253	4,239
Energy To Food (Btu/lb)	563	567	565
Total Energy to Fryer (Btu)	5,017	5,017	5,017
Energy to Fryer (Btu/lb)	669	655	669
Cooking-Energy Efficiency (%)	84.1	84.8	84.5
Electric Energy Rate (kW)	4.65	4.68	4.66
Production Rate (lb/h)	23.7	23.9	23.8
Average Recovery Time (sec)	52	51	52

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