



# Food Service Technology Center Appliance Test Summary Report

The information in this report is based on data generated at the PG&E Food Service Technology Center. 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.

<b>Manufacturer</b>	AutoFry
<b>Model</b>	MTI 10XL
<b>Appliance</b>	Self Contained, Ventless Fryer - electric

<b>Report Number</b>	5012.09.58
<b>Report Date</b>	Oct., 2009
<b>Tested By</b>	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)	7.20
Measured Energy Input Rate (kW)	6.92
Difference (%)	3.9

## Preheat to 350°F

Duration (min)	8.58
Energy Consumption (Wh)	990
Preheat Rate (°F/min)	32

## Idle at 350°F

Idle Energy Rate (kW)	0.96
-----------------------	------

## Heavy-Load Cooking Energy Efficiency <sup>a</sup>

Food Product	French Fries
Load Size (lb)	1.50
Cook Time (min)	2.33
Average Recovery Time (sec)	20.4
Cooking Energy Rate (kW)	6.59
Energy to Food (Btu/lb)	553
Energy to Appliance (Btu/lb)	664
Cooking-Energy Efficiency (%)	83.2 ± 3.8
Production Capacity (lb/hr)	33.8 ± 0.4

<sup>a</sup> based on a minimum of three test replicates.



AutoFry MTI 10XL Self Contained Fryer

## AutoFry

25567 Seaboard Lane  
Hayward, CA 94545  
[www.AutoFry.com](http://www.AutoFry.com)

<b>Manufacturer</b>	AutoFry
<b>Model</b>	MTI 10XL
<b>Appliance</b>	Self-Contained, Ventless Fryer - Electric

<b>Report Number</b>	5012.09.46
<b>Report Date</b>	Oct., 2009
<b>Tested By</b>	K. Sham

## Heavy-Load Test Data

	Test #1	Test #2	Test #3
<b>Measured Values</b>			
Test Voltage (V)	240	240	240
Energy Consumption (Wh)	1470	1440	1470
Total Energy (Btu)	5,017	4,915	5,017
<b>Cook Time (min)</b>	<b>2.33</b>	<b>2.33</b>	<b>2.33</b>
Total Test Time (min)	13.23	13.33	13.35
Weight Loss (%)	29.40	29.30	29.70
Initial Weight (lb)	7.500	7.500	7.500
Final Weight (lb)	5.295	5.305	5.275
Initial Moisture Content (%)	65.2	65.2	65.2
Final Moisture Content (%)	46.3	46.3	47.9
Initial Temperature (°F)	0	0	0
Final Temperature (°F)	212	212	212
<b>Calculated Values</b>			
Initial Weight of Water (lb)	4.890	4.890	4.890
Final Weight of Water (lb)	2.452	2.456	2.527
Sensible (Btu)	1,105	1,105	1,105
Latent – Heat of Fusion (Btu)	704	704	704
Latent – Heat of Vaporization (Btu)	2,365	2,361	2,292
Total Energy to Food (Btu)	4,174	4,170	4,101
<b>Energy To Food (Btu/lb)</b>	<b>557</b>	<b>556</b>	<b>547</b>
Total Energy to Fryer (Btu)	5,017	4,915	5,017
<b>Energy to Fryer (Btu/lb)</b>	<b>669</b>	<b>655</b>	<b>669</b>
<b>Cooking-Energy Efficiency (%)</b>	<b>83.2</b>	<b>84.8</b>	<b>81.7</b>
<b>Electric Energy Rate (kW)</b>	<b>6.67</b>	<b>6.48</b>	<b>6.61</b>
<b>Production Rate (lb/h)</b>	<b>34.0</b>	<b>33.8</b>	<b>33.7</b>
<b>Average Recovery Time (sec)</b>	<b>20</b>	<b>20</b>	<b>20</b>

### Legal Notice

This report was prepared as a result of work sponsored by the California Public Utilities Commission (Commission). It does not necessarily represent the views of the Commission, its employees, or the State of California. The Commission, the State of California, its employees, contractors, and subcontractors make no warranty, express or implied, and assume no legal liability for the information in this report; nor does any party represent that the use of this information will not infringe upon privately owned rights. This report has not been approved or disapproved by the Commission nor has the Commission passed upon the accuracy or adequacy of the information in this report.

### Disclaimer

Neither Fisher-Nickel, inc. nor the Food Service Technology Center nor any of its employees makes any warranty, expressed or implied, or assumes any legal liability of responsibility for the accuracy, completeness, or usefulness of any data, information, method, product or process disclosed in this document, or represents that its use will not infringe any privately-owned rights, including but not limited to, patents, trademarks, or copyrights.

Reference to specific products or manufacturers is not an endorsement of that product or manufacturer by Fisher-Nickel, inc., the Food Service Technology Center or Pacific Gas & Electric Company (PG&E).

Retention of this consulting firm by PG&E to develop this report does not constitute endorsement by PG&E for any work performed other than that specified in the scope of this project.