



# Food Service Technology Center Appliance Test Summary Report

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<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

## 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
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## 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)

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## 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>

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