# 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.

| | |
|---|---|
| **Manufacturer** | Taylor |
| **Model** | C811-23 |
| **Appliance** | 3- Foot Gas Griddle with Optional Top Side Cookers |
| **Griddle Plate** | 36 x 24 inch |

| | |
|---|---|
| **Report Number** | 501310028 |
| **Report Date** | August, 2010 |
| **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 griddle by applying the ASTM F1275-03 (2008) Standard Test Method with the griddle operating in single-sided mode.

## Energy Input Rate

| | |
|---|---|
| Rated Gas Energy Input Rate (Btu/h) | 75,000 |
| Measured Gas Energy Input Rate (Btu/h) | 78,500 |
| Difference (%) | 4.70 |

## Preheat

| | |
|---|---|
| Duration (min) | 13.50 |
| Gas Energy Consumption (Btu) | 17,661 |
| Preheat Rate (°F/min) | 20.6 |

## Idle at 375°F

| | |
|---|---|
| Gas Idle Energy Rate (Btu/h) | 14,575 |
| Electrical Control Energy Rate (kW) | 0.20 |
| Normalized Idle Energy Rate (Btu/h//ft$^2$) | 2,429 |

## Heavy-Load Cooking Energy Efficiency [a]

| | |
|---|---|
| Food Product | Hamburgers |
| Load Size (Count) | 24 |
| Cook Time (min) | 7.42 |
| Average Recovery Time (min) | <1 |
| Gas Cooking Energy Rate (Btu/h) | 45,012 |
| Electric Cooking Energy Rate – Control (kW) | 0.20 |
| Energy to Food (Btu/lb) | 473 |
| Energy to Appliance (Btu/lb) | 1,071 |
| Cooking-Energy Efficiency (%) | 44.2 ± 1.53 |
| Production Capacity (lb/hr) | 42.7 ± 0.52 |

[a] based on a minimum of three test replicates.

**Taylor C811-23 gas griddle.**
**(shown with optional top side cookers)**

Taylor Company

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Rockton, IL 61072
http://www.taylor-company.com/

| | | | |
|---|---|---|---|
| **Manufacturer** | Taylor | **Report Number** | 501310028 |
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| **Appliance** | 3-foot gas griddle with optional top side cookers | **Tested By** | K.Sham |

## Heavy-Load Test Data

| | Repetition #1 | Repetition #2 | Repetition #3 |
|---|---|---|---|
| **Measured Values** | | | |
| Gas Energy Consumption (Btu) | 38,182 | 37,965 | 38,341 |
| Electric Energy Consumption (Wh) | 170 | 170 | 180 |
| **Cook Time (min)** | **7.42** | **7,42** | **7,42** |
| Total Test Time (min) | 50.95 | 50.63 | 51.03 |
| Weight Loss (%) | 35.32 | 35.67 | 35.57 |
| Initial Weight (lb) | 36.17 | 36.22 | 36.18 |
| Final Weight (lb) | 23.61 | 23.30 | 23.31 |
| Initial Fat Content (%) | 19.9 | 19.9 | 19.9 |
| Initial Moisture Content (%) | 60.8 | 60.8 | 60.8 |
| Final Moisture Content (%) | 51.7 | 51.3 | 50.9 |
| Initial Temperature (°F) | 0 | 0 | 0 |
| Final Temperature (°F) | 162 | 165 | 164 |
| **Calculated Values** | | | |
| Initial Weight of Water (lb) | 21.98 | 22.01 | 21.98 |
| Final Weight of Water (lb) | 12.22 | 11.94 | 11.86 |
| Weight of Fat (lb) | 7.20 | 7.21 | 7.21 |
| Weight of Solids (lb) | 7.23 | 7.24 | 7.21 |
| Sensible to Ice (Btu) | 352 | 352 | 352 |
| Sensible to Water (Btu) | 2,859 | 2,917 | 2,908 |
| Sensible to Fat (Btu) | 467 | 475 | 473 |
| Sensible to Solids (Btu) | 235 | 237 | 237 |
| Latent – Water Fusion (Btu) | 3,165 | 3,169 | 3,165 |
| Latent – Fat Fusion (Btu) | 309 | 310 | 310 |
| Latent – Heat of Vaporization (Btu) | 9,467 | 9,762 | 9,815 |
| Total Energy to Food (Btu) | 16,853 | 17,222 | 17,259 |
| **Energy To Food (Btu/lb)** | **466** | **475** | **477** |
| Total Energy to Griddle (Btu) | 38,762 | 38,545 | 38,956 |
| **Energy to Griddle (Btu/lb)** | **1,072** | **1,064** | **1,077** |
| **Cooking-Energy Efficiency (%)** | **43.5** | **44.7** | **44.3** |
| **Gas Cooking Energy Rate (Btu/h)** | **44,960** | **44,990** | **45,080** |
| **Control Energy Rate (kW)** | **0.20** | **0.20** | **0.21** |
| **Production Rate (lb/h)** | **42.6** | **42.9** | **42.5** |
| **Average Recovery Time (min)** | **<1** | **<1** | **<1** |




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