



Food Service Technology Center Appliance Test Summary Report

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Manufacturer	Anetsberger, LLC
Model	TM2436G
Appliance	3-foot gas griddle
Griddle Plate	24 x 36 inch

Report Number	501310039
Report Date	Aug., 2010
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 double-sided griddle by applying the ASTM F1275-03(2008) Standard Test Method.

Energy Input Rate

Heating Value	1046
Rated Gas Energy Input Rate (Btu/h)	82,500
Measured Gas Energy Input Rate (Btu/h)	83,186
Difference (%)	0.83

Preheat to 375°F

Heating Value	1040
Duration (min)	9.75
Gas Energy Consumption (Btu)	13,176
Preheat Rate (°F/min)	31.0

Idle at 375°F

Heating Value	1040
Idle Energy Rate (Btu/h)	14,945
Idle Energy Rate per Square Foot (Btu/h/ft ²)	2,491



Anetsberger TM2436G gas griddle.

Cooking Energy-Efficiency Tests^a

Test	Heavy Load	Light Load
Heating Value	1040	1040
Food Product	Hamburgers	Hamburgers
Load Size (Count)	24	4
Cook Time (min)	8.00	8.48
< 20Average Recovery Time (min)	< 1.0	< 20
Gas Cooking Energy Rate (Btu/h)	46,487	22,658
Energy to Food (Btu/lb)	461	470
Energy to Appliance (Btu/lb)	1,160	3,312
Cooking-Energy Efficiency (%)	39.8 ± 1.1	14.2 ± 0.4
Production Capacity (lb/hr)	40.1 ± 1.2	6.84 ± 0.0

^a based on a minimum of three test replicates.

Anetsberger, LLC

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Heavy-Load Test Data

	Repetition #1	Repetition #2	Repetition #3
Measured Values			
Heating Value	1040	1040	1040
Gas Energy Consumption (Btu)	40,941	42,559	42,007
Cook Time (min)	7.88	8.08	8.08
Total Test Time (min)	53.38	54.65	53.95
Weight Loss (%)	32.98	33.77	33.64
Initial Weight (lb)	36.038	36.034	36.089
Final Weight (lb)	24.151	23.864	23.949
Initial Fat Content (%)	19.9	19.9	19.9
Initial Moisture Content (%)	62.0	62.0	62.0
Final Moisture Content (%)	53.4	53.1	53.3
Initial Temperature (°F)	0	0	0
Final Temperature (°F)	158	160	159
Calculated Values			
Initial Weight of Water (lb)	22.343	22.341	22.375
Final Weight of Water (lb)	12.899	12.675	12.754
Weight of Fat (lb)	7.171	7.171	7.182
Weight of Solids (lb)	7.208	7.207	7.218
Sensible to Ice (Btu)	357	357	358
Sensible to Water (Btu)	2,806	2,851	2,848
Sensible to Fat (Btu)	452	458	458
Sensible to Solids (Btu)	227	230	230
Latent – Water Fusion (Btu)	3,217	3,217	3,222
Latent – Fat Fusion (Btu)	246	245	245
Latent – Heat of Vaporization (Btu)	9,161	9,376	9,332
Total Energy to Food (Btu)	16,467	16,734	16,693
Energy To Food (Btu/lb)	457	464	463
Total Energy to Griddle (Btu)	40,941	42,559	42,007
Energy to Griddle (Btu/lb)	1,136	1,181	1,164
Cooking-Energy Efficiency (%)	40.2	39.3	39.7
Gas Cooking Energy Rate (Btu/h)	46,018	46,726	46,718
Production Rate (lb/h)	40.5	39.6	40.1
Average Recovery Time (min)	< 1.0	< 1.0	< 1.0

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Light-Load Test Data

	Repetition #1	Repetition #2	Repetition #3	Repetition #4
Measured Values				
Heating Value	1036	1036	1036	1036
Gas Energy Consumption (Btu)	20,313	20,323	19,802	19,719
Cook Time (min)	8.40	8.50	8.50	8.50
Total Test Time (min)	52.86	53.12	53.11	53.18
Weight Loss (%)	34.35	33.88	34.08	34.21
Initial Weight (lb)	6.040	6.050	6.045	6.065
Final Weight (lb)	3.965	4.000	3.985	3.990
Initial Fat Content (%)	19.9	19.9	19.9	19.9
Initial Moisture Content (%)	62.0	62.0	62.0	62.0
Final Moisture Content (%)	52.6	52.6	53.0	52.3
Initial Temperature (°F)	0	0	0	0
Final Temperature (°F)	161	160	160	161
Calculated Values				
Initial Weight of Water (lb)	3.745	3.751	3.748	3.760
Final Weight of Water (lb)	2.084	2.102	2.113	2.087
Weight of Fat (lb)	1.202	1.204	1.203	1.207
Weight of Solids (lb)	1.208	1.210	1.209	1.213
Sensible to Ice (Btu)	60	60	60	60
Sensible to Water (Btu)	484	480	481	484
Sensible to Fat (Btu)	77	77	77	78
Sensible to Solids (Btu)	39	39	39	39
Latent – Water Fusion (Btu)	539	540	540	541
Latent – Fat Fusion (Btu)	41	41	41	41
Latent – Heat of Vaporization (Btu)	1,611	1,599	1,586	1,623
Total Energy to Food (Btu)	2,851	2,836	2,823	2,867
Energy To Food (Btu/lb)	472	469	467	473
Total Energy to Griddle (Btu)	20,313	20,323	19,802	19,719
Energy to Griddle (Btu/lb)	3,363	3,359	3,276	3,251
Cooking-Energy Efficiency (%)	14.0	14.0	14.3	14.5
Gas Cooking Energy Rate (Btu/h)	23,057	22,955	22,371	22,248
Production Rate (lb/h)	6.86	6.83	6.83	6.84
Average Recovery Time (sec)	< 20	< 20	< 20	< 20

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