

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	Moffat
Model	G32D4
Appliance	Full-size convection oven - Gas

Report Number	501310092
Test Date	November, 2010
Tested By	D.Livchak

Purpose of Testing

This testing determined the energy input rate, preheat time and energy, idle energy rate, heavy-load cooking-energy efficiency, and browning uniformity of the oven by applying ASTM F1496.

Cavity Volume

Internal Oven-Cavity Volume (CuFt)	6.36
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Energy Input Rate

Rated Energy Input Rate (Btu/hr)	33,000
Measured Energy Input Rate (Btu/hr)	33,019
Difference (%)	0.06
Fan/Control Energy Rate (kW)	0.145

Preheat to 340°F

Duration (min)	11.00
Energy Consumption (Btu)	5,303
Preheat Rate (°F/min)	23.55

Idle at 350°F

Idle Energy Rate (Btu/hr)	11,433
Control Idle Energy Rate (W)	123

Heavy-Load Cooking Energy Efficiency ^a

Food Product	Russet Potatoes
Oven Temperature Set-point (°F)	350
Cook Time (min)	60.52
Cooking Energy Rate (Btu/hr)	28,170
Cooking Energy Rate (kW)	0.129
Energy to Food (Btu/lb)	223
Energy to Appliance (Btu/lb)	494
Cooking-Energy Efficiency (%)	45.1 ± 0.7
Production Capacity (lb/hr)	57.9 ± 3.4

^a based on a minimum of three test replicates.



Moffat

16 Osborne St.
Phillipstown, Christchurch, New Zealand
<http://www.moffat.com/>

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Heavy-Load Potato Test Data

	Test #1	Test #2	Test #3
Measured Values			
Cook Time (min)	61.94	59.52	60.10
Gas Energy (Btu)	28,858	27,904	28,475
Electric Energy to Oven (kWh)	0.129	0.129	0.129
Heating Value (Btu)	1022	1020	1020
Initial Weight of Potatoes (lb)	58.22	58.55	58.45
Final Weight of Potatoes (lb)	51.09	51.88	51.48
Initial Temperature of Potatoes (°F)	77.5	76.5	75.2
Final Temperature of Potatoes (°F)	205.0	205.0	205.0
Calculated Values			
Sensible Heat (Btu)	6,235	6,320	6,373
Latent - Heat of Vaporization (Btu)	6,916	6,470	6,761
Total Energy to Food (Btu)	13,151	12,790	13,134
Energy to Food (Btu/lb)	226	218	225
Total Energy to Oven (Btu)	29,298	28,344	28,915
Energy per Pound of Food Cooked (Btu/lb)	503	492	495
Cooking-Energy Efficiency (%)	44.9	45.1	45.4
Electric-Only Cooking-Energy Rate (kW)	0.133	0.129	0.128
Gas-Only Cooking Energy Rate (Btu/h)	27,950	28,129	28,428
Production Capacity (lb/h)	56.4	59.0	58.4

Sheet Cake Uniformity

Food Product	White Cake Mix
Bake Time (min)	27.42

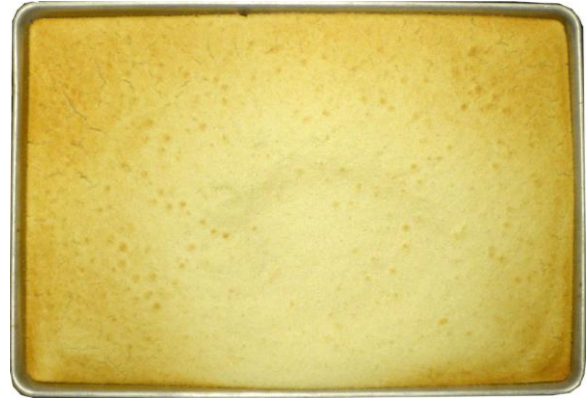
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Top



Lower Center



Upper Center



Bottom



Fan located on the bottom in all pictures

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