



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	Vulcan
Model	VC6GD-9
Appliance	Full-size convection oven - Gas

Report Number	5012.09.40
Test Date	September, 2009
Tested By	A.Spitz

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 oven by applying ASTM F1496.

Cavity Volume

Internal Oven-Cavity Volume (Ft ³)	3.49
--	------

Energy Input Rate

Rated Energy Input Rate (Btu/h)	44,000
Measured Energy Input Rate (Btu/h)	45,615
Difference (%)	3.54
Fan/Control Energy Rate (kW)	0.54

Preheat to 340°F

Duration (min)	13.33
Energy Consumption (Btu)	10,150
Preheat Rate (°F/min)	20.19

Idle at 350°F

Idle Energy Rate (Btu/h)	11,097
--------------------------	--------

Heavy-Load Cooking Energy Efficiency ^a

Food Product	Russet Potatoes
Oven Temperature Set-point (°F)	350
Cook Time (min)	48.53
Cooking Energy Rate (Btu/h)	39,156
Cooking Energy Rate (kW)	0.52
Energy to Food (Btu/lb)	212
Energy to Appliance (Btu/lb)	456
Cooking-Energy Efficiency (%)	46.5 ± 0.8
Production Capacity (lb/hr)	89.7 ± 5.5

^a based on a minimum of three test replicates.



Vulcan Hart Corporation

3600 North Point Boulevard
Baltimore, MD 21222

www.vulcanhart.com

Manufacturer	Vulcan
Model	VC6GD-9
Appliance	Full-size convection oven - Gas

Report Number	5012.09.40
Test Date	September, 2009
Tested By	A.Spitz

Heavy-Load Potato Test Data

	Test #1	Test #2	Test #3
Measured Values			
Cook Time (min)	47.17	48.83	49.58
Electric Energy to Oven (kWh)	0.41	0.43	0.43
Initial Weight of Potatoes (lb)	72.490	72.520	72.611
Final Weight of Potatoes (lb)	65.285	64.375	64.785
Initial Temperature of Potatoes (°F)	72.82	80.61	72.24
Final Temperature of Potatoes (°F)	204.89	204.95	204.99
Calculated Values			
Sensible Heat (Btu)	8,042	7,574	8,097
Latent - Heat of Vaporization (Btu)	6,989	7,901	7,591
Total Energy to Food (Btu)	15,031	15,475	15,688
Energy to Food (Btu/lb)	207	213	216
Total Energy to Oven (Btu)	32,535	33,269	33,500
Energy per Pound of Food Cooked (Btu/lb)	449	459	461
Cooking-Energy Efficiency (%)	46.20	46.52	46.83
Electric-Only Cooking-Energy Rate (kW)	0.52	0.52	0.52
Gas-Only Cooking Energy Rate (Btu/h)	39,619	39,094	38,756
Production Capacity (lb/h)	92.21	89.20	87.87

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.