

Greenplate PID Inbench Electric BBQ Unit Power and Temperature Results



Introduction

The objective of the test is to determine the power usage and monitor how the BBQ maintains the temperature at the cooking plate throughout the 28-minute cooking cycle.

The below results show the temperature and power graphs for a Greenplate Inbench Electric BBQ Unit set at 240°C and 300°C at the cooking plate. The results are without a food load.

Test Parameters

The tests were performed on different days with specific weather conditions recorded for the time and date the test was undertaken.

Test Location: Greenplate Head Office Outdoor Testing Area

Test Equipment: 1 – EDMI MK7C Atlas, 2 – Fluke 54IIB, 3 – Digitech QM1601

Test 1 - 240°C - No Food Load Summary	
Date and Time:	01/09/2021 3:18:57 PM Start
Ambient Temperature:	24°C
Wind Speed/Direction:	19 Km/h SW
BBQ Set Temperature:	240°C
Time to reach set temperature:	06:50
Duration of Test:	28 minutes 10 seconds
Total Power Consumption:	429 watts

Please refer to Correlation between plate temperature and thermocouple channel temperature 240°C Full Report (attached)

Start Time	1/09/2021 3:18:57 PM				
Stop Time	1/09/2021 3:47:07 PM				
Elapsed Time	0:28:10				
Interval	0:00:10				
Total readings	170				
Thermocouple Type	K				
Scaling	(none)				
	Max Time Stamp	Max	Average	Min	Min Time Stamp
T1	1/09/2021 3:27:07 PM	262.1 °C	215.9 °C	25.6 °C	1/09/2021 3:18:57 P
T2	1/09/2021 3:27:47 PM	267.2 °C	216.8 °C	25.6 °C	1/09/2021 3:18:57 P
T1-T2	1/09/2021 3:22:17 PM	22.5 °C	-0.9 °C	-13.0 °C	1/09/2021 3:29:27 P

Keyword: Important

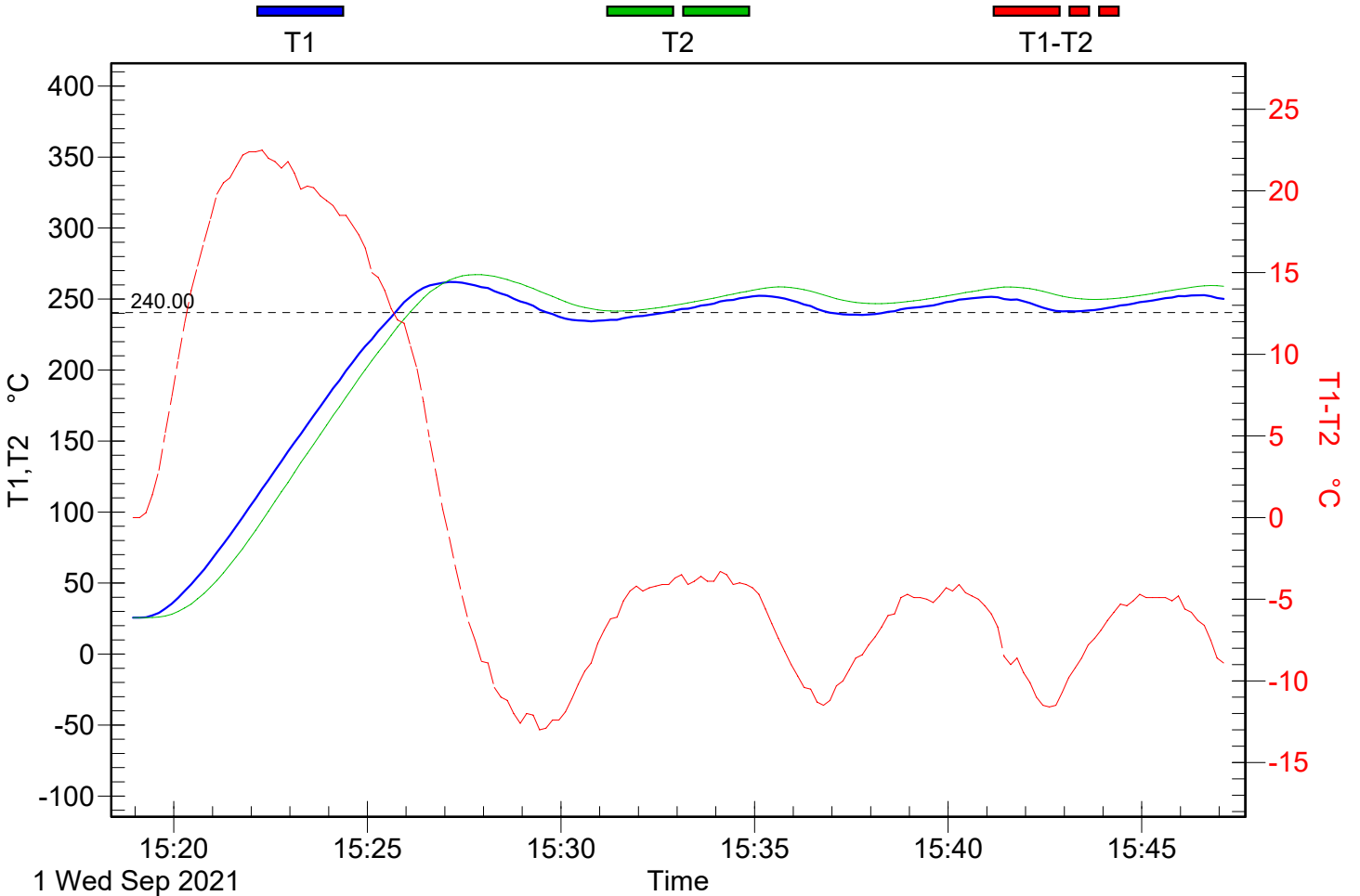
Form Saved Time: 1/09/2021 4:45:41 PM

Upload Time: 1/09/2021 4:31:22 PM

Test Purpose:

This test was conducted to determine the amount of power used to heat up the BBQ from 25.6°C to 240°C. Including the time it takes from start up to reaching the set temperature.

Graph Name: Correlation Between Plate Temperature and Thermocouple Channel Temperature



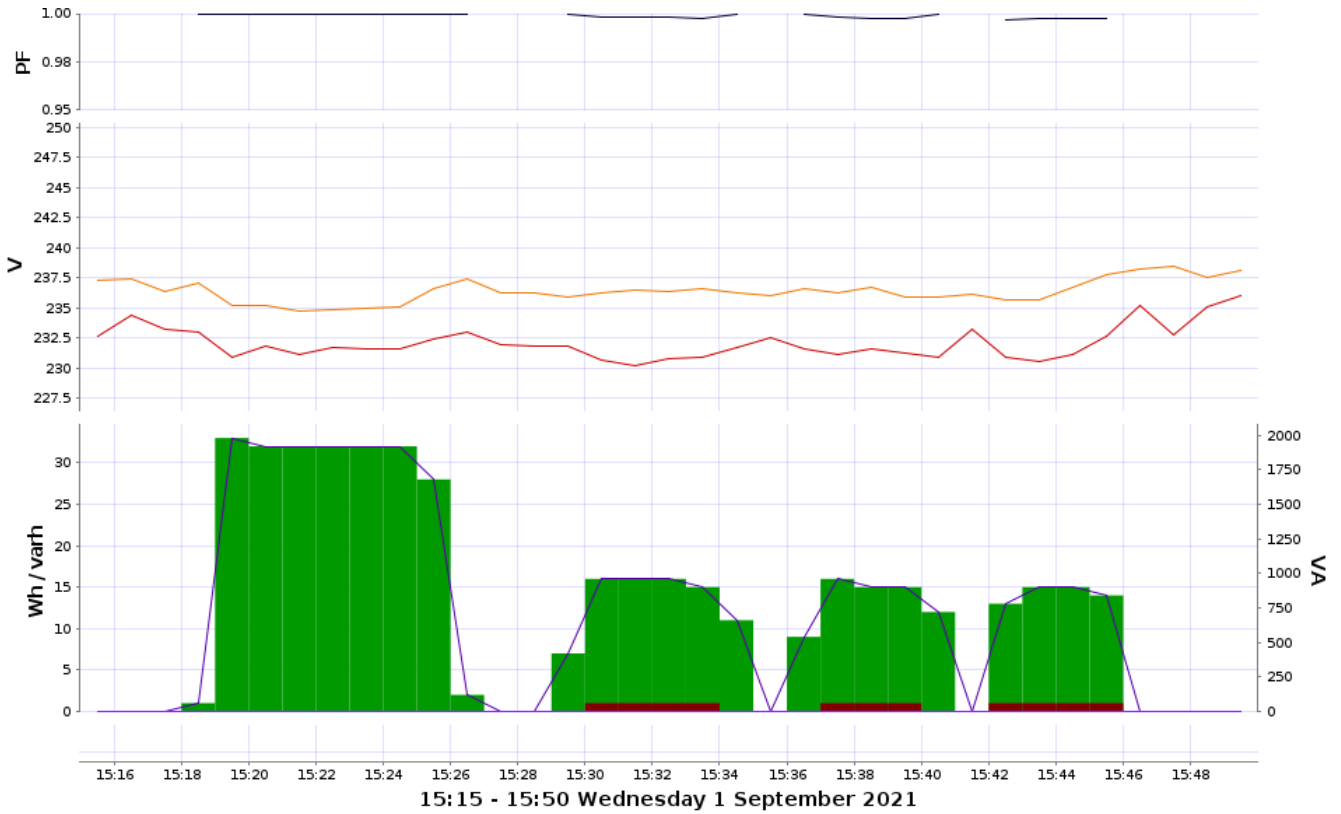
Test Conditions: T1 (Thermocouple 1) was positioned to the BBQ cooking surface directly above the Thermocouple channel. T2 (Thermocouple 2) was located inside the Thermocouple channel beneath the cooking plate. The BBQ Thermocouple which controls the regulation of the Temperature Module is also located in this same channel. Ambient local temperature was 24°C. Ambient Plate temperature 25.6°C. Set temperature on the BBQ Temperature Module was 240°C.

	T1	T2	T1-T2	Time Stamp
1	25.6 °C	25.6 °C	0.0 °C	1/09/2021 3:18:57 PM
2	25.6 °C	25.6 °C	0.0 °C	1/09/2021 3:19:07 PM
3	25.9 °C	25.6 °C	0.3 °C	1/09/2021 3:19:17 PM
4	27.2 °C	25.8 °C	1.4 °C	1/09/2021 3:19:27 PM
5	29.0 °C	26.1 °C	2.9 °C	1/09/2021 3:19:37 PM
6	32.0 °C	26.8 °C	5.2 °C	1/09/2021 3:19:47 PM
7	35.5 °C	28.1 °C	7.4 °C	1/09/2021 3:19:57 PM
8	39.7 °C	30.0 °C	9.7 °C	1/09/2021 3:20:07 PM
9	44.4 °C	32.5 °C	11.9 °C	1/09/2021 3:20:17 PM











Time Interval - EDMI BNE Portable 214048390

Custom Date Range in 1 Minute intervals
Wed 01 Sep 2021 15:15 - Wed 01 Sep 2021 15:50 (GMT+10:00)

Greenplete BBQ's / EDMI BNE Portable 214048390 - BBQ3



Usage Summary

Key	Series	Intervals	Minimum	Maximum	Average	Total
	Wh Consumption E1	35 mins	0 Wh Wed 01 Sep 2021 15:16	33 Wh Wed 01 Sep 2021 15:20	12.26 Wh	429 Wh
	varh Consumption Q1	35 mins	0 varh Wed 01 Sep 2021 15:16	1 varh Wed 01 Sep 2021 15:31	0.31 varh	11 varh
	VA Consumption	35 mins	0 VA Wed 01 Sep 2021 15:16	1,980 VA Wed 01 Sep 2021 15:20	736.06 VA	
	PF Consumption	24 mins	1.00 PF Wed 01 Sep 2021 15:43	1.00 PF Wed 01 Sep 2021 15:19	1.00 PF	
	Wh Generation B1	35 mins	0 Wh Wed 01 Sep 2021 15:16	0 Wh Wed 01 Sep 2021 15:16	0 Wh	0 Wh
	varh Generation K1	35 mins	0 varh Wed 01 Sep 2021 15:16	0 varh Wed 01 Sep 2021 15:16	0 varh	0 varh
	VA Generation	35 mins	0 VA Wed 01 Sep 2021 15:16	0 VA Wed 01 Sep 2021 15:16	0 VA	
	PF Generation	0				
	V Max	35 mins	234.78 V Wed 01 Sep 2021 15:22	238.41 V Wed 01 Sep 2021 15:48	236.41 V	
	V Min	35 mins	230.17 V Wed 01 Sep 2021 15:32	236.03 V Wed 01 Sep 2021 15:50	232.11 V	