

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 test shows the BBQs results with 1kg of thin sausages on the plate cooked to an internal temperature of 75°C.

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 – EDM I MK7C Atlas, 2 – Fluke 54IIB, 3 – Digitech QM1601

Food Load: 1 x 12 Pack Beef Sausages 1Kg per “Food Load Test”

Test 4 - 300°C - With Food Load Summary	
Date and Time:	07/09/2021 12:26:00 PM Start
Ambient Temperature:	21.4°C
Wind Speed/Direction:	17 Km/h N
BBQ Set Temperature:	300°C
Time to reach set temperature:	10:00
Duration of Test:	28 minutes 10 seconds
Total Power Consumption:	773 watts
Food Load:	12 x Thin Beef Sausages (1kg)

Summary

The food load was placed onto the cooking plate as soon as the plate reached its set temperature of 300°C. The food load did not drop the cooking plate temperature below 0.5°C and for under 1 minute.

Please refer to Cooking Test Results 300°C Full Report (attached)

Start Time	7/09/2021 12:26:00 PM				
Stop Time	7/09/2021 12:54:10 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	7/09/2021 12:45:30 PM	341.0 °C	264.3 °C	20.2 °C	7/09/2021 12:26:00
T2	7/09/2021 12:46:10 PM	350.5 °C	267.2 °C	21.4 °C	7/09/2021 12:26:00
T1-T2	7/09/2021 12:28:20 PM	13.7 °C	-2.9 °C	-15.7 °C	7/09/2021 12:47:40

Keyword: Important

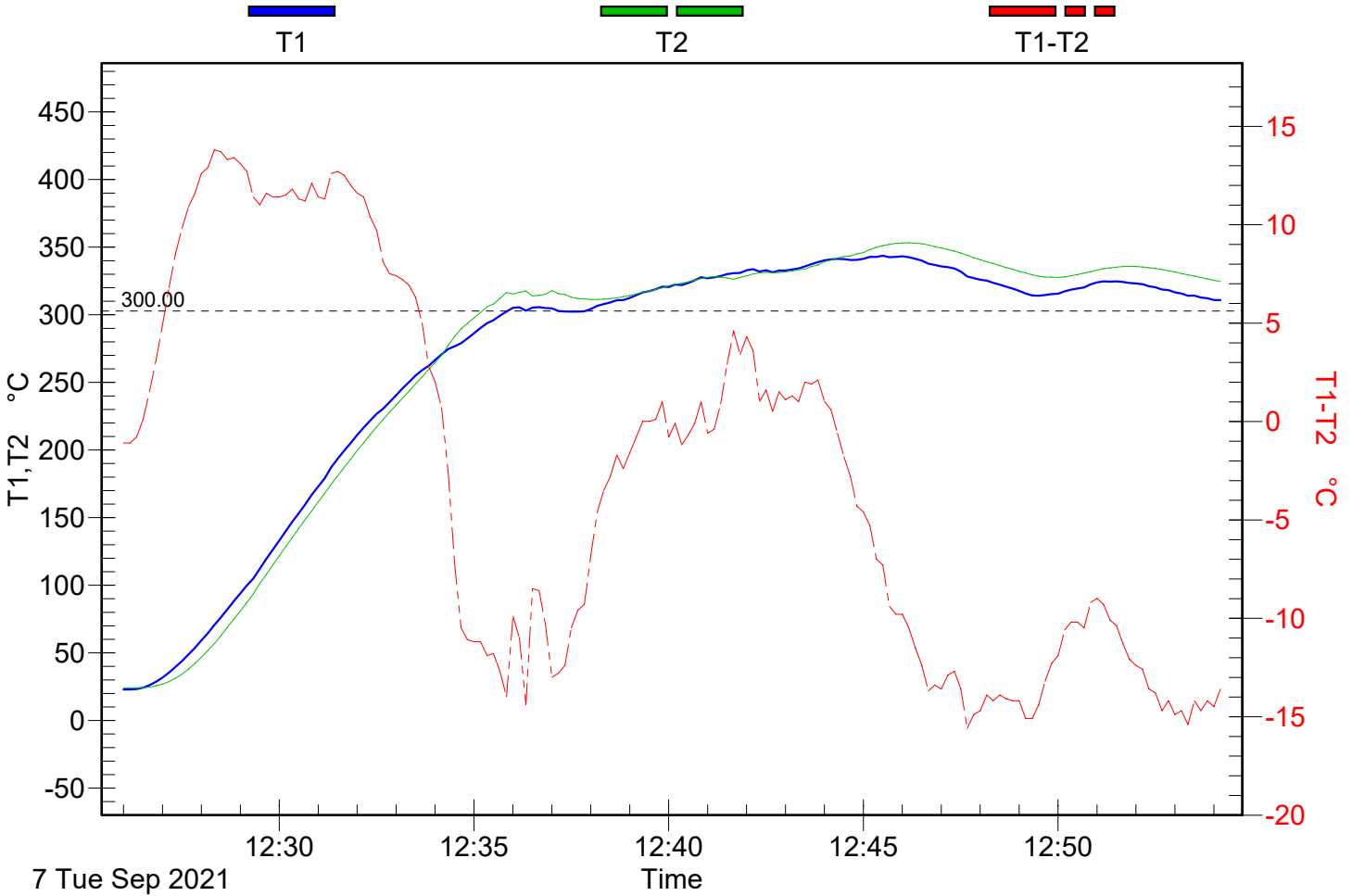
Form Saved Time: 7/09/2021 1:39:33 PM

Upload Time: 7/09/2021 1:33:00 PM

Test Purpose:

This test was conducted to determine the amount of power used to heat up the BBQ from 20.2°C to 300° C. 1kg of sausages was added to the plate when the set temperature was reached. This test was also conducted to determine the influence the food load had on the cooking time and temperature stability.

Graph Name: Cooking Test Results 300°C



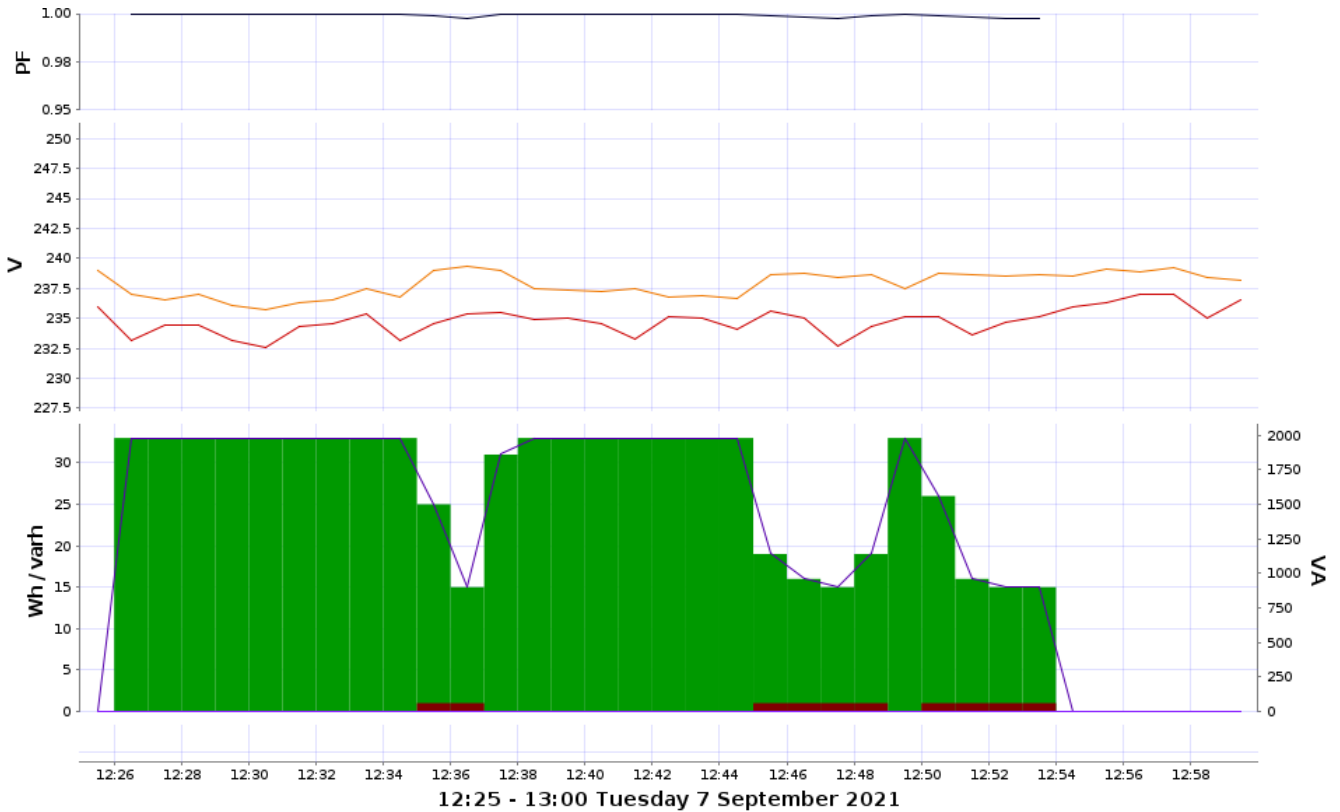
Thermocouple 1 (T1) was positioned to the BBQ cooking surface directly above the Thermocouple channel. Thermocouple 2 (T2) was located inside the Thermocouple channel beneath the cooking plate. The BBQ Thermocouple which regulates the temperature is also located in this same channel. We also had a Thermocouple in one of the sausages that was applied to the plate when the unit reached 300°C at 12:35:35. The sausages were cooking until an internal temperature of 75°C then removed. Ambient local temperature was 21.4°C, Ambient plate temperature was 20.2°C. Set temperature on the BBQ Temperature Module was 300°C.

	T1	T2	T1-T2	Time Stamp
163	313.9 °	328.9 °	-15.0 °	7/09/2021 12:53:00 PM
164	313.0 °	327.8 °	-14.8 °	7/09/2021 12:53:10 PM
165	311.3 °	326.8 °	-15.5 °	7/09/2021 12:53:20 PM
166	311.5 °	325.8 °	-14.3 °	7/09/2021 12:53:30 PM
167	310.0 °	324.8 °	-14.8 °	7/09/2021 12:53:40 PM
168	309.5 °	323.8 °	-14.3 °	7/09/2021 12:53:50 PM
169	308.2 °	322.8 °	-14.6 °	7/09/2021 12:54:00 PM
170	308.2 °	321.9 °	-13.7 °	7/09/2021 12:54:10 PM









Time Interval - EDMI BNE Portable 214048390

Custom Date Range in 1 Minute intervals
Tue 07 Sep 2021 12:25 - Tue 07 Sep 2021 13:00 (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 Tue 07 Sep 2021 12:26	33 Wh Tue 07 Sep 2021 12:27	22.09 Wh	773 Wh
	varh Consumption Q1	35 mins	0 varh Tue 07 Sep 2021 12:26	1 varh Tue 07 Sep 2021 12:36	0.29 varh	10 varh
	VA Consumption	35 mins	0 VA Tue 07 Sep 2021 12:26	1,980 VA Tue 07 Sep 2021 12:27	1,325.64 VA	
	PF Consumption	28 mins	1.00 PF Tue 07 Sep 2021 12:37	1.00 PF Tue 07 Sep 2021 12:27	1.00 PF	
	Wh Generation B1	35 mins	0 Wh Tue 07 Sep 2021 12:26	0 Wh Tue 07 Sep 2021 12:26	0 Wh	0 Wh
	varh Generation K1	35 mins	0 varh Tue 07 Sep 2021 12:26	0 varh Tue 07 Sep 2021 12:26	0 varh	0 varh
	VA Generation	35 mins	0 VA Tue 07 Sep 2021 12:26	0 VA Tue 07 Sep 2021 12:26	0 VA	
	PF Generation	0				
	V Max	35 mins	235.73 v Tue 07 Sep 2021 12:31	239.3 v Tue 07 Sep 2021 12:37	237.85 v	
	V Min	35 mins	232.6 v Tue 07 Sep 2021 12:31	237.02 v Tue 07 Sep 2021 12:58	234.79 v	