

Spec Sheet	1.1
UL Ventless Label	2.1
UL Listing	3.1
UL KNLZ Explained	4.1
Emissions Test Results	5.1
Emissions by Product.....	6.1
Fire and Smoke Statement.....	7.1
Energy Usage Estimate.....	8.1
Surface Temperatures.....	9.1
LA County Ventless Authorization	10.1



THE Sōta™

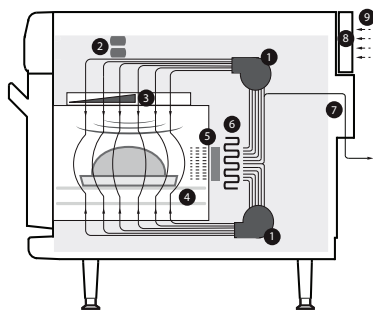


PERFORMANCE

Utilizing TurboChef's patented technology to rapidly cook food without compromising quality, the Sōta provides superior cooking performance while requiring less space and consuming less energy.

VENTILATION

- UL (KNLZ) listed for ventless operation.†
- EPA 202 test (8 hr):
 - Product: Pepperoni Pizzas
 - Results: 0.64 mg/m³
 - Ventless Requirement: <5.00 mg/m³
- Internal catalytic filtration to limit smoke, grease, and odor emissions.



1. Blower Motors
2. Microwave System
3. Stirred Impinged Air (Top) and Microwave
4. Impinged Air (Bottom)
5. Catalytic Converter
6. Impingement Heater
7. Vent Tube Catalyst
8. Air Filter
9. Inlet Air for Cooling Electronic Components

Project _____

Item No. _____

Quantity _____

EXTERIOR CONSTRUCTION

- Powder coated, corrosion-resistant steel outer wrap and door
- Die-cast aluminum front panels with matte-chrome accents
- Cool-to-touch exterior; all surfaces below 50°C
- Ergonomic matte-chrome door handle
- 4-inch adjustable legs

INTERIOR CONSTRUCTION

- 201/304 stainless steel
- Fully welded and insulated cook chamber
- Removable rack and lower jetplate

STANDARD FEATURES

- Independently-controlled dual motors for vertically-recirculated air impingement
- Top-launched microwave system
- Stirrer to help ensure even distribution of air and microwave
- Integral recirculating catalytic converter for UL (KNLZ) listed ventless operation
- External air filtration
- Vent catalyst to further limit emissions and odors
- LED timer counts down last 30 seconds of cook time
- Smart menu system capable of storing up to 256 recipes
- Flash firmware updates via smart card
- Single or dual-temperature interface
- Field-configurable for single or multiphase operation (requires service call)
- Self-diagnostics for monitoring oven components and performance
- Smart Voltage Sensor Technology* (U.S. only)
- Stackable (requires stacking stand)
- Includes plug and cord (6 ft. nominal)
- Warranty – 1 year parts and labor

COMES WITH STANDARD ACCESSORIES

- 1 Bottle Oven Cleaner (103180)
- 1 Bottle Oven Guard (103181)
- 2 Trigger Sprayers (103182)
- 2 Solid Aluminum Pans (i1-9496)
- 1 Aluminum Paddle (NGC-1478)



This product conforms to the ventilation recommendations set forth by NFPA96 using EPA202 test method.

* Smart Voltage Sensor Technology does not compensate for lack of or over voltage situations. It is the responsibility of the owner to supply voltage to the unit according to the specifications on the back of this sheet.

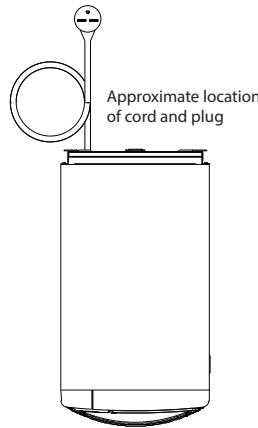
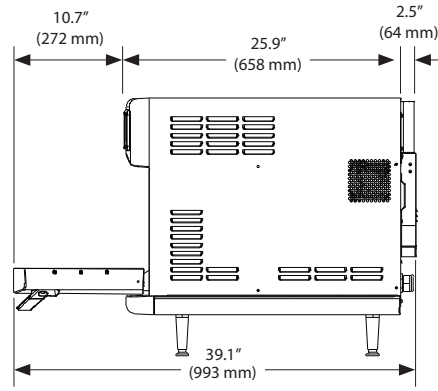
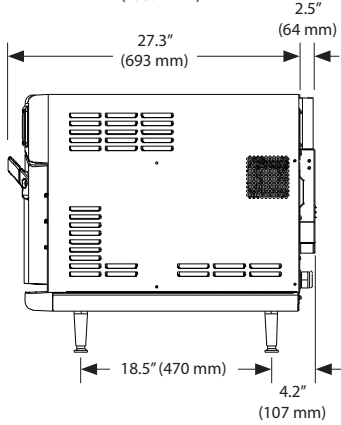
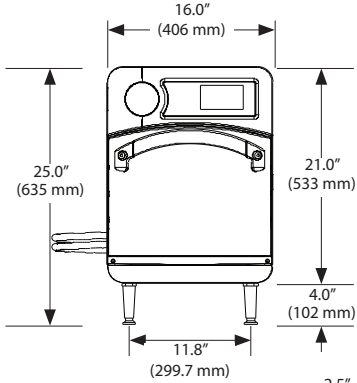
† Ventless certification is for all food items except for foods classified as "fatty raw proteins." Such foods include bone-in, skin-on chicken, raw hamburger meat, raw bacon, raw sausage, steaks, etc. If cooking these types of foods, consult local HVAC codes and authorities to ensure compliance with ventilation requirements.

Ultimate ventless allowance is dependent upon AHJ approval, as some jurisdictions may not recognize the UL certification or application. If you have questions regarding ventless certifications or local codes, please email ventless.help@turbochef.com

TurboChef reserves the right to make substitutions of components or change specifications without prior notice.



Sota™



- US, CAN, LA (NEMA 6-30P)
- US, CAN – SINGLE MAG (NEMA 6-20P)
- UK, BK (IEC 309, 3-pin)
- UK – SINGLE MAG 13 A (BS1363)
- EU – SINGLE MAG 16 A (CEE7/7)
- JK (NEMA L6-50, PSE, 3-blade)
- JD (NEMA L6-50, PSE, 4-blade)
- ED, BD, SD (IEC 309, 4-pin)
- EW, KW (IEC 309, 5-pin)
- AU (Clipsal, 5-pin)

DIMENSIONS

Single Units		
Height	25.0"	635 mm
Width	16.0"	406 mm
Depth	29.8"	757 mm
Weight: Standard / Single Mag	170 lb. / 135 lb.	77.1 kg / 61 kg
Cook Chamber		
Height	7.2"	183 mm
Width	12.5"	317 mm
Depth	10.5"	266 mm
Volume	0.54 cu.ft.	15.4 liters
Wall Clearance (Oven not intended for built-in installation)		
Top	5"	102 mm
Sides	2"	51 mm

SHIPPING INFORMATION

U.S.: All ovens shipped within the U.S. are packaged in a double-wall corrugated box banded to a wooden skid.
 International: All International ovens shipped via Air or Less than Container Loads are packaged in wooden crates.

Box size: 37" x 24" x 37" (940 mm x 610 mm x 940 mm)
 Crate size: 38" x 26" x 38" (965 mm x 660 mm x 965 mm)
 Item class: 85 NMFC #26770 HS code 8419.81

Approximate boxed weight (standard/single mag): 205 lb. (93 kg) / 170 lb. (77.1 kg)
 Approximate crated weight (standard/single mag): 275 lb. (125 kg) / 240 lb. (109 kg)

Minimum entry clearance required for box: 24.5" (622 mm)
 Minimum entry clearance required for crate: 26.5" (673 mm)

ELECTRICAL SPECIFICATIONS

SINGLE PHASE		
US/Canada	i1-9500-1	208/240 VAC, 60 Hz, 30 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
US/Canada – Single Mag 20 A	i1-9500-104	208/240 VAC, 60 Hz, 20 amps Max Input: 4.2/4.8 kW, MW: 1.9 kW, HTR: 4.0/4.2 kW
Europe (UK)	i1-9500-2-UK	230 VAC, 50 Hz, 27 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
Europe (UK) – Single Mag 13 A	i1-9500-105-UK	230 VAC, 50 Hz, 13 amps Max Input: 3 kW, MW: 1.9 kW, HTR: 2.7 kW
Europe (EU) – Single Mag 16 A	i1-9500-106-UK	230 VAC, 50 Hz, 16 amps Max Input: 3.6 kW, MW: 1.9 kW, HTR: 2.7 kW
Brazil (BK)	i1-9500-6-BK	220 VAC, 60 Hz, 28 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
Latin America (LA)	i1-9500-7-LA	220 VAC, 60 Hz, 28 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
Japan (JK)	i1-9500-8-JK	200 VAC, 50 Hz, 30 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
Japan (JK)	i1-9500-10-JK	200 VAC, 60 Hz, 30 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
MULTIPHASE		
Europe Delta (ED)	i1-9500-3-ED	230 VAC, 50 Hz, 20 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
Europe Wye (EW)	i1-9500-4-EW	400 VAC, 50 Hz, 16 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
Australia Wye (AU)	i1-9500-5-AU	400 VAC, 50 Hz, 16 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
Japan Delta (JD)	i1-9500-9-JD	200 VAC, 50 Hz, 20 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
Japan Delta (JD)	i1-9500-11-JD	200 VAC, 60 Hz, 20 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
Korea/Middle East Wye (KW)	i1-9500-12-KW	400 VAC, 60 Hz, 16 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW
Korea/Middle East Delta (SD)	i1-9500-13-SD	230 VAC, 60 Hz, 20 amps Max Input: 6.2 kW, MW: 3.2 kW, HTR: 6.0 kW

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 Fax: +1 214.379.6073 | www.turbochef.com

⚠ TurboChef requires installing a type D circuit breaker for all installations.



Page 2.1

LISTED
81Y5

**Commercial Microwave/Convection Oven
with Integral Systems for Limiting
the Emissions of Grease Laden Air**

**This Product Conforms to the Ventilation Recommendations
Set Forth by NFPA96 Using EPA202 Test Method**



KNLZ.E151487 Commercial Cooking Appliances with Integral Systems for Limiting the Emission of Grease-laden Air

[Page Bottom](#)

Commercial Cooking Appliances with Integral Systems for Limiting the Emission of Grease-laden Air

[See General Information for Commercial Cooking Appliances with Integral Systems for Limiting the Emission of Grease-laden Air](#)

TURBOCHEF TECHNOLOGIES INC

E151487

2801 Trade Center Dr
Carrollton, TX 75007 USA

Commercial microwave/convection ovens, Model(s) C3/C*, Encore 2, Encore*, i3*, i5*, NGC*, NGO*

Commercial ovens, Model(s) HHB, HHB2

Conveyor Ovens, Model(s) HHC1618, HHC2020, HHC2620

* - Indicated complementary listed models.

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KNLZ.GuideInfo

Commercial Cooking Appliances with Integral Systems for Limiting the Emission of Grease-laden Air

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[Page Bottom](#)

[Heaters and Heating Equipment] (Heaters, Cooking Appliances) Commercial Cooking Appliances with Integral Systems for Limiting the Emission of Grease-laden Air

[See General Information for Heaters, Cooking Appliances](#)

This category covers cooking equipment intended for commercial use, such as pressurized deep fat fryers and other appliances for use in commercial kitchens, restaurants or other business establishments where food is prepared. Each appliance covered in this category is manufactured with an integral system feature to limit the emission of grease-laden air from the cooking process to the room ambient.

These appliances have been evaluated for the limit of 5 mg/m³ for the emission of grease-laden air to the room ambient in accordance with the recommendations of the National Fire Protection Association Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA 96, using the EPA-202 test method prescribed for cooking appliances provided with integral recirculating air systems.

These products are not intended for connection to a ducted exhaust system.

Appliances in this category are not provided with an integral fire extinguishing system. Authorities having jurisdiction should be consulted as to the requirements for this equipment with respect to fire extinguishing systems, such as the need for field installed systems in accordance with NFPA 96.

For products with integral recirculating systems including fire extinguishing systems, refer to Commercial, with Integral Recirculating Systems ([KNKG](#)).

In cases where the nature or construction of equipment is such that special precautions beyond the requirements of the National Electrical Code must be observed in installations or use, suitable warning or special instructions are marked on the equipment.

Appliances Listed in this category are suitable for wiring with either copper or aluminum power supply conductors unless marked "Use Copper Wire Only For Power Supply Connections" .

Commercial cooking appliances of certain types are designed for permanent connections to water supply and sewer lines at the point of installation. Authorities having jurisdiction should be consulted as to the requirements for this equipment with respect to sanitation and connection to water supply and waste disposal lines.

Neither the toxicity of coatings nor the physiological effects on persons consuming food products prepared by use of these appliances has been investigated.

For cooking oil filters that are not an integral part of another appliance, see Commercial Filters for Cooking Oil ([KNRF](#)).

For additional information, see Electrical Equipment for Use in Ordinary Locations ([AALZ](#)) and Heating, Cooling, Ventilating and Cooking Equipment ([AAHC](#)).

The basic standard used to investigate products in this category is [ANSI/UL 197](#), "Commercial Electric Cooking Appliances".

Appliances Listed in this category with an integral cooking oil filter have been additionally investigated to the requirements in the standard "Commercial Filters for Cooking Oil", [ANSI/UL 1889](#).

The Listing Mark of Underwriters Laboratories Inc. on the product is the only method provided by UL to identify products manufactured under its Listing and Follow-Up Service. The Listing Mark for these products includes the name and/or symbol of Underwriters Laboratories Inc. (as illustrated in the Introduction of this Directory) together with the word "LISTED," a control number and one of the following product names as appropriate: "Commercial Cooking Appliance," "Cooking Appliance," or other appropriate product identity specified in the individual Listing, along with the words "with integral system for limiting the emission of grease-laden air. "

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File: E151487

Project: 09NK11970

Date: 9/23/2009

Client:

TurboChef Technologies

Model:

NGO

Product Tested

9 in. Pepperoni Pizza

TurboChef Technologies
Model: **NGO**

Calculations needed for Nozzle Size

$\Delta H@$ = 40.281 This number is calculated when device is calibrated

% Oxygen = 21.04 %O₂ Oxygen inside stack during operation

% Carbon = 0.01 %CO₂ Carbon Dioxide inside stack during operation

Stack Temperature = 28.6 °C Temperature inside stack during operation

Barametric Pressure = 744 mmHg Barametric pressure at location of meter

Stack Static Pressure = -2.032 mm H₂O Static Pressure inside of duct

Average Square root ΔP = 1.867 ΔP mm H₂O Enter pressure differential at each transvers point in mm H₂O, the take square root of ΔP .

	Pressure	CFM		Pressure	CFM
1	3.556	496	5	2.794	510
2	3.81	530	6	3.556	515
3	3.81	520	7	3.302	510
4	3.556	520	8	3.556	499
				Average	512.5

Travers Points = 8

Meter Temperature = 22 °C

Pitot Tube Coefficient = 0.84

% Moisture = 49.7

Sample Rate = 21.24 Lpm

Ideal Nozzle Size = 11.298 mm When numbers are entered into calculator, ideal nozzle size will be displayed. Enter number here

0.444803 in

Actual Nozzle Size Used = 1/2 in If ideal nozzle size is not available, locate nearest number. Enter what nozzle size was used for testing

TurboChef Technologies
Model: **NGO**

Start Time: **9:15**

Product Tested: **9 in. Pepperoni Pizza**

Cook Time: **100sec**

End Time: **5:30**

Barometric Pressure: **744** mmHg

Recovery Time: **0sec**

Test Date: **09/23/09**

Room Ambient: **23C**

IMPINGER WEIGHT

Filter Paper Start of Test: **0.6488** g

Frit

Filter Paper End of Test: **0.6494** g

Impinger	Start Volume/Weight	Start Weight (lbs)	End Volume/Weight	End Weight (lbs)
1 (ml)	100	1.336/1.556	30	1.404
2 (ml)	100	1.284/1.504	165	1.648
3 (ml)	0	1.344	35	1.422
4 (g)	200	1.328/1.770	222	1.924

Timed Meter Readings

Traverse Point Number	Sampling Time Hr/Sec	Gas Meter Reading (m ³)	Orifice Pressure Differential ΔH	Velocity Head ΔP	Pump Vaccum In.hg	Stack Temp °C	Probe Temp °C	Box Temp °C	Impinger Temp °C	Gas Meter Outlet °C
Initial	-	154.402	42	1.4	0.0	27	121	122	8	25
1	:10	154.633	42	1.4	0.0	28	121	122	10	27
1	:20	154.841	42	1.4	0.0	28	121	121	11	29
1	:30	155.047	42	1.4	0.0	28	121	122	14	31
1	:40	155.253	42	1.4	0.0	28	121	121	15	32
1	:50	155.459	41	1.4	0.0	28	121	121	16	33
1	1hr	155.665	41	1.4	0.0	29	121	121	13	34
2	:10	155.872	42	1.5	0.0	32	121	122	11	35
2	:20	156.079	42	1.5	0.0	31	121	121	12	36
2	:30	156.286	41	1.4	0.0	32	121	122	14	36
2	:40	156.491	40	1.2	0.0	31	121	121	16	36
2	:50	156.698	42	1.2	0.0	32	121	122	17	36
2	2hr	156.906	42	1.2	0.0	32	121	121	13	37

Traverse Point Number	Sampling Time Hr/Sec	Gas Meter Reading (m ³)	Orifice Pressure Differential ΔH	Velocity Head ΔP	Pump Vacuum In.hg	Stack Temp °C	Probe Temp °C	Box Temp °C	Impinger Temp °C	Gas Meter Outlet °C
3	:10	157.114	42	1.4	0.0	32	121	121	12	37
3	:20	157.323	42	1.3	0.0	32	121	121	13	37
3	:30	157.529	42	1.2	0.0	32	121	121	15	37
3	:40	157.737	42	1.3	0.0	32	121	122	12	37
3	:50	157.945	42	1.4	0.0	32	121	121	12	37
3	3hr	158.153	42	1.3	0.0	32	121	122	13	37
4	:10	158.361	42	1.4	0.0	29	121	122	11	37
4	:20	158.569	42	1.4	0.0	29	121	121	13	37
4	:30	158.777	42	1.4	0.0	30	121	122	14	37
4	:40	158.985	41	1.4	0.0	30	121	122	16	38
4	:50	159.191	42	1.2	0.0	29	121	121	12	37
4	4hr	159.399	42	1.2	0.0	30	121	122	12	37
5	:10	159.606	42	1.2	0.0	31	121	121	11	37
5	:20	159.815	42	1.3	0.0	30	121	122	12	37
5	:30	160.024	42	1.5	0.0	30	121	122	14	38
5	:40	160.232	42	1.5	0.0	30	121	121	15	38
5	:50	160.442	42	1.0	0.0	30	121	122	12	38
5	5hr	160.651	42	0.9	0.0	31	121	122	12	38
6	:10	160.861	42	0.0	0.0	35	121	122	12	38
6	:20	161.318	42	1.4	0.0	32	121	122	15	38
6	:30	161.528	42	1.6	0.0	32	121	122	16	38
6	:40	161.735	42	1.6	0.0	32	121	122	17	38
6	:50	161.945	42	1.6	0.0	32	122	122	17	38
6	6hr	162.153	42	1.6	0.0	32	121	122	13	38
7	:10	162.363	42	1.4	0.0	32	121	122	11	38
7	:20	162.575	42	1.4	0.0	32	121	122	11	38
7	:30	162.782	42	1.4	0.0	32	121	122	13	38
7	:40	162.990	42	1.4	0.0	31	121	122	14	38
7	:50	163.220	42	1.4	0.0	32	121	122	16	38
7	7hr	163.408	42	1.4	0.0	32	122	122	16	38
8	:10	163.617	42	1.6	0.0	28	122	122	13	38
8	:20	163.826	42	1.8	0.0	28	121	122	13	38
8	:30	164.035	42	1.8	0.0	28	121	122	14	38
8	:40	164.244	42	1.8	0.0	28	121	122	14	38
8	:50	164.452	42	1.8	1.0	28	121	122	15	38
8	8hr	164.661	42	1.4	1.0	30	122	122	16	38

Average Gas Meter Outlet Temperature: 36.36735 °C

Average Gas Meter Outlet Temperature: 97.46122 °F

$$\Delta H = \underline{41.875} \text{ mm H}_2\text{O}$$

$$T_m = \underline{557.46} \text{ R}$$

$$\Delta H = \underline{1.648622} \text{ in H}_2\text{O}$$

TurboChef Technologies

Model: NGO

Start Time:	<u>9:15</u>	End Time:	<u>5:30</u>	Test Date:	<u>09/23/09</u>
Cook Time:	<u>100sec</u>	Product Tested:	9 in. Pepperoni Pizza		
Recovery Time:	<u>0sec</u>	Barometric Pressure:	<u>744</u>		

Post-Test Data

Gas Meter Reading initial	154.40 m ³	Gas Meter Reading End	164.66 m ³
Vm	10.26 m ³ 362.29 ft ³		
Y- Constant	<input type="text" value="0.949"/>	This data is obtained during device calibration. Verify number with most recent calibration certification on LEM	
Tstd constant	528.0 R		
Tm	557.5 R	Number obtained from Datasheet	
Barometric Pressure	744 mmHg 29.29134 inHg	Barometric Pressure on day of Test	
Pstd	30.42 inHg		
Δ H	1.648622 in H ₂ O		
Vmstd	314.86 ft ³ 8.915878 m ³		

Post-Filter Data

Filter paper	649.40 mg	Weight at End of Test
Filter AR	648.80 mg	Weight at Beginning of Test
delta H	0.60 mg	Change of Weight at End of Test

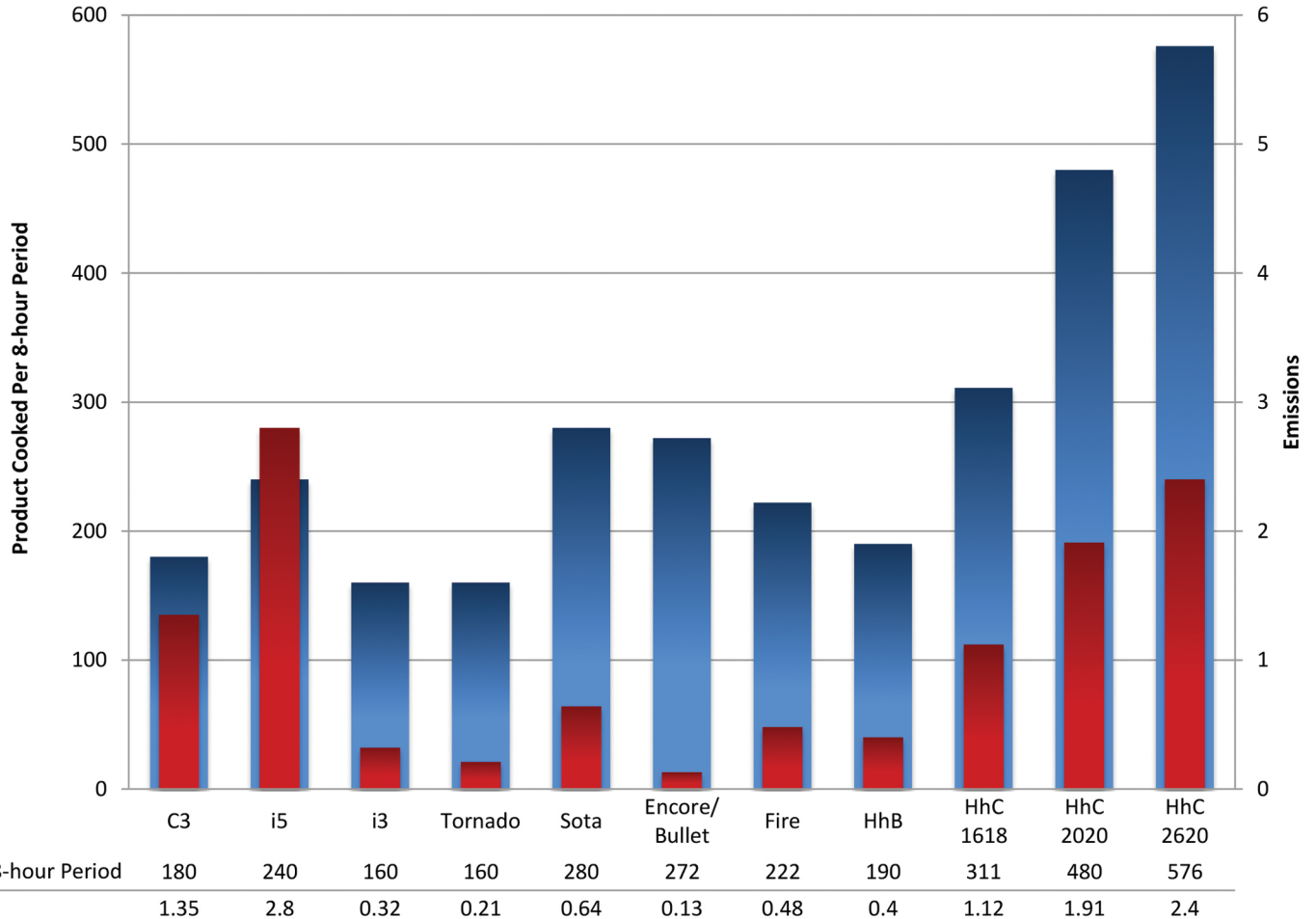
Post-Acid Used

Acetone Wash	3.1 mg	Bottle 2	Mc	5.1 mg
Acetone Blank	0 mg	Bottle 3		
Impinger Contents	0.5 mg	Bottle 4	Mn	5.7 mg
MeCl Wash	1.6 mg	Bottle 5		
MeCl Blank	0 mg	Bottle 6		
Water Blank	0.1 mg	Bottle 7		

Total Grease EmissionsCs=Mn/Vmstd **0.64 mg/m³**

UL® (KNLZ) Emissions by Product

Ventless Requirement: <math><5.00 \text{ mg/m}^3</math>





October 18, 2004

Mr. Mike Denny
 Building Services,
 224 West Knight St.
 City of Sioux Falls,
 South Dakota, 57102
 Ph: 605-367-8252

Re: Fire and smoke containment

Dear Mr. Denny:

The TurboChef ovens have been extensively tested and conform to UL 923 and UL KNLZ standards. The UL 923 standard is the electrical/product safety standard and the KNLZ is the low particulate matter emissions standard to which we conform. While both standards address different aspects of the oven, they both have inherent overlap as it relates to grease/smoke/fire handling.

As it relates specifically to fire safety, UL 923 specifies:

Section 57 Cavity Fire Containment Test:

The performance of an appliance subjected to this test shall be considered acceptable if all of the following conditions are met:

- a) There is no emission of fire, flame, or molten metal outside the appliance nor glowing or ignition of the cheesecloth, tissue paper, or wood surface;*
- b) The fuse rated 3 A does not open;*
- c) Following the test, the appliance complies with the requirements of Leakage Current, Section 33, and Dielectric Voltage-Withstand Test, Section 39, as applicable to primary circuits; and*
- d) Following the test and following 10 c of operation (opening and closing the door), the appliance complies with the requirements in 57.12. The radiation emission shall not exceed 5mW/cm².*

Test Method:

Section 57.2 requires that 4 potatoes each weighing between 150g and 200g be placed inside the oven under test and cooked using full microwave power and hot air (if applicable) until the potatoes catch fire. Note: The test must be repeated until it catches fire. During this test, pieces of tissue paper and cheesecloth are placed above, below and around the product to ensure that the fire and/or excessive heat generated is safely contained within the confines of the appliance.

As it relates to grease handling, UL KNLZ specifies:

UL KNLZ Guide Information Excerpt:

"These appliances have been evaluated for the limit of 5 mg/m³ for the emission of grease-laden air to the room ambient in accordance with the recommendations of the National Fire Protection Association Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA 96, using the EPA-202 test method prescribed for cooking appliances provided with integral recirculating air systems."

Test Method:

The UL KNLZ category requires that products must have less than 5.0 mg/m³ of particulate matter emissions during 8 continuous hours of cooking a "worst case" food product as measured by EPA 202. Note: Our products were tested using full-fat pepperoni pizzas.

As it pertains specifically to smoke: Smoke typically consists of visible grease particulate that escapes from a product during operation. Our ovens utilize a recirculating airpath that is catalytic scrubbed, thus the airborne grease is combusted as it crosses our catalyst. Given this, under typical/normal operating conditions, our product does not emit smoke.

If you have any issues or specific questions regarding the above, please contact me directly.

Best regards,

James K. Pool III

James K. Pool III
Vice President Engineering,
TurboChef Technologies, Inc.,
Ph: 214.379.6020
Email: james.pool@turbochef.com

NGO ENERGY ESTIMATE ASTM METHOD



Changeable Parameters		
Operating Time	12	Hours
Energy Costs	\$0.11	kWHR
Snooze Mode	0.00	Hours
Cook Cycles/Day	100	Cooks/Day
Typical Cook Time	45	Seconds

Do Not Change the following values

	Time (min)	Power (Watts)	Cost/Day	Balance of Time (hrs)
Warm up	15	3900	\$0.11	11.75
Cooking	75	2800	\$0.40	10.50
Snooze Idle	0	0	\$0.00	10.50
Idle	630	750	\$0.90	0
Total/Day			\$1.42	Yearly
Total/Month			\$42.46	\$509.51

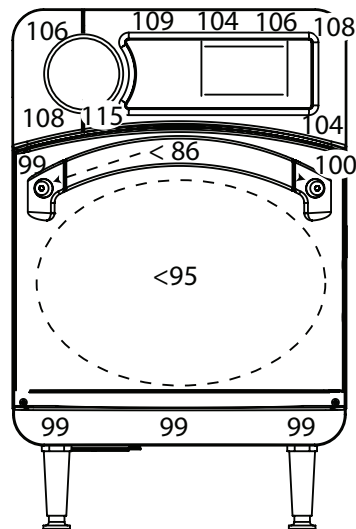
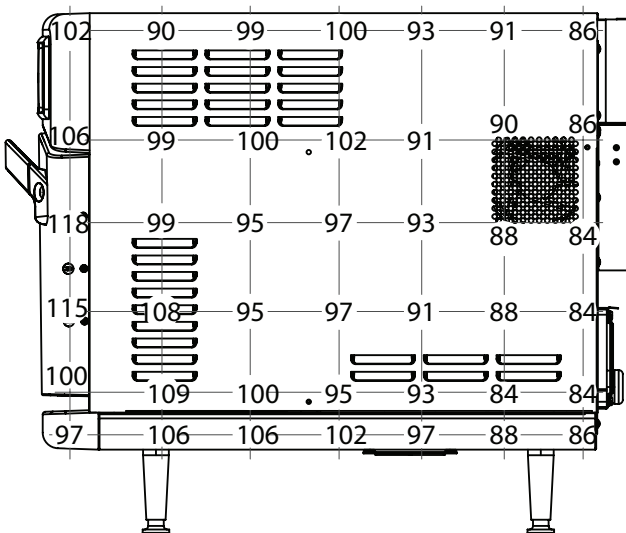
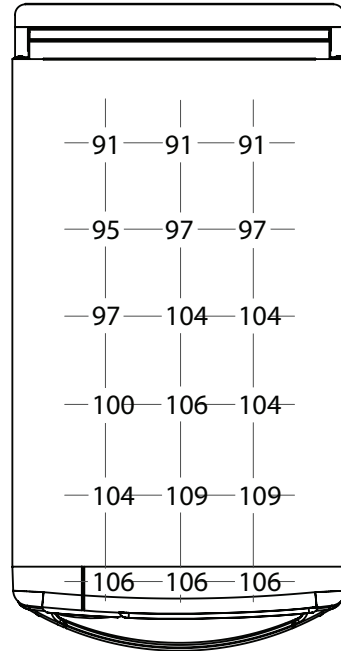
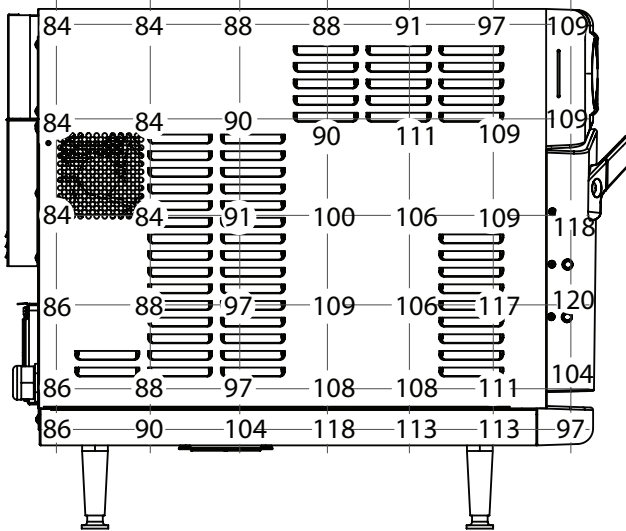
HVAC Requirements Per Operating Time -- Note: Approximations Only					
Average Energy Cooking And Idle (J)	Warmup Energy (J)	Total Energy (J)	Total average Power (W)	Total Environmental Load kBtu/hr	Average Cooling Requirement (ton of AC)
40950000	3510000	44460000	1029	3.51	0.29

TURBOCHEF TECHNOLOGIES, INC.

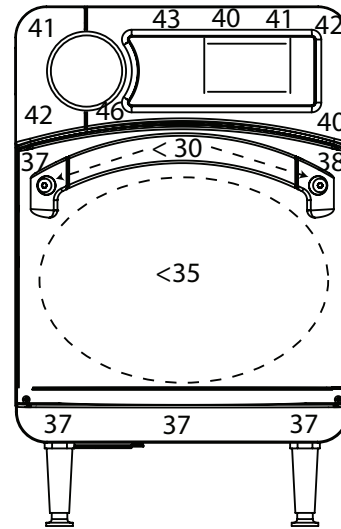
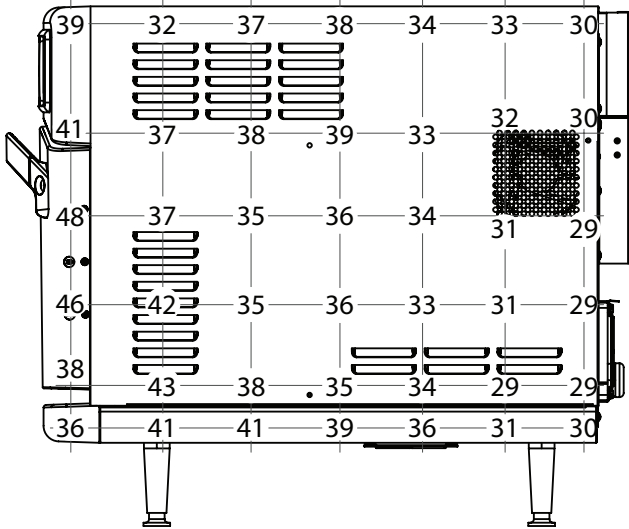
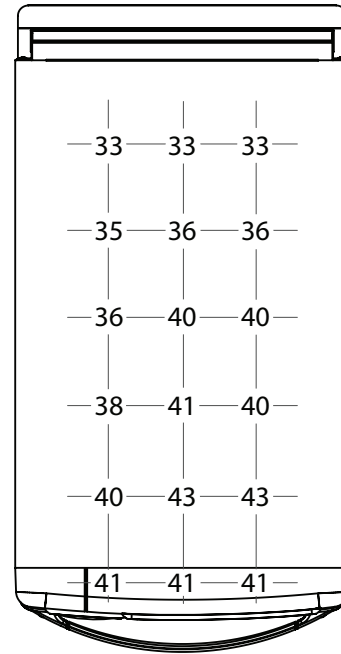
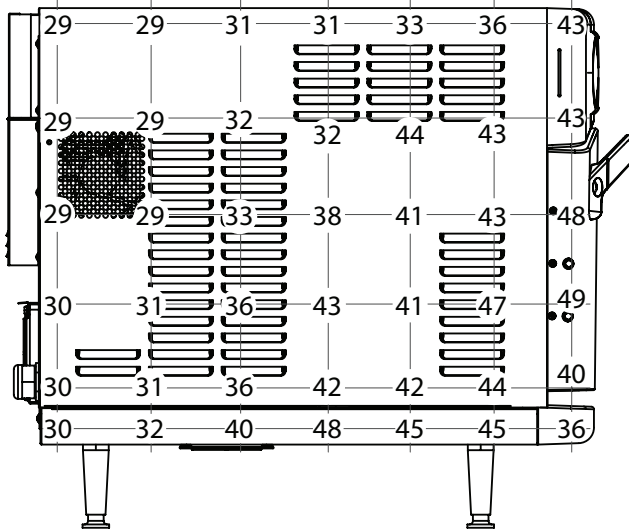
i1 (NGO, Söta, Panini, Waterless Steamer) Oven Surface Temperatures

The illustrations in this document represent the surface testing data reported for TurboChef i1 ovens (model NGO) during cooking after two and a half hours of idle at 520°F (271°C), simulating the highest temperature condition.

Fahrenheit Measurements



Celsius Measurements





CYNTHIA A. HARDING, M.P.H.
Interim Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

ANGELO J. BELLOMO, REHS, QEP
Deputy Director for Health Protection

TERRI S. WILLIAMS, REHS
Acting Director of Environmental Health

Brenda J. Lopez, REHS
Director, Bureau of Specialized Surveillance and Enforcement

5050 Commerce Drive
Baldwin Park, California 91706
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November 10, 2015

James K. Pool III
Senior Vice President, Engineering
Turbo Chef Technologies, Inc.
4240 International Parkway, Suite 101
Carrollton, TX 75007

Ventilation Exemption Plan Check No.	ME-2010-004rev – Revision to ME-2010-004
Application Type:	Equipment specific – NGO (SOTA) 208/ 240 V, 6.2 KW
Effective Date:	11/10/2015
Expiration Date:	11/10/2020
Telephone:	(214) 379-6020
Email:	James.Pool@turbochef.com

RE: RENEWED EXEMPTION FROM MECHANICAL EXHAUST VENTILATION FOR TURBOCHEF TECHNOLOGIES, INC., Model: NGO (SOTA) Oven

Dear Mr. Pool:

The County of Los Angeles Department of Public Health, Environmental Health, Plan Check Program, has completed a review of the Turbo Chef Technologies, Inc. Model NGO oven for exemption from the mechanical exhaust ventilation requirements of Section 114149.1(a) of the California Retail Food Code.

You have provided documentation that these ovens have Underwriter's Laboratory KNLZ approval, and also provided the manufacturer specification sheet including the results of the eight-hour cooking emissions test conducted on the NGO oven.

The test results indicate that the particulate matter concentration produced was 0.64 mg/m³ to be considered a low grease emission appliance.

Turbo Chef Technologies
November 10, 2015
Page 2 of 2

Therefore, additional mechanical ventilation in the form of a Type I or Type II hood is no required by the County of Los Angeles Department of Public Health, provided the following contingencies are met.

1. There shall be no more than 2 unventilated model NGO ovens per food facility.
2. No other heat producing food related equipment requiring ventilation shall be permitted in a food facility without the addition of mechanical ventilation.
3. The equipment must be installed, serviced, and maintained according to the manufacture's specification.
4. The NGO oven shall be used for the cooking or warming of pizza, bread, bakery products, or similar items only. No raw animal protein products shall be cooked in the equipment unless mechanical ventilation is provided.
5. No items that generate grease-laden vapors shall be prepared or cooked in the unventilated NGO oven.
6. The NGO oven must be operated in a well-ventilated area approved for food preparation.
7. If ownership changes of a food facility that is operating the exempt equipment, then the new owner/ operator will be informed of the operating conditions.
8. This exemption from mechanical exhaust ventilation shall not be deemed to supersede any local building and fire code requirements pertaining to electrical and fire safety.

This exemption shall be in effect for a period of five years from the date of this letter, or until revoked. However, this exemption shall not preclude this Department from requiring the installation of mechanical exhaust ventilation when operation of the NGO oven at a specific location creates a sanitation or safety problem.

If you have any questions or need additional information, please contact the Plan Check Program at (626) 430-5560.

Sincerely,



Swati Bhatt, M. S., R.E.H.S.
Chief Environmental Health Specialist
Plan Check Program
5050 Commerce Drive
Baldwin Park, CA 91706