

1400 Series Impinger® I

Single Belt Conveyorized Oven

Models:			
1421-000-E	1450-000-U	1454-000-N	1458-P00-E
1433-000-E	1451-000-U	1455-000-N	
1434-000-E	1452-000-U	1456-V00-V	
1447-000-N	1453-000-U	1457-V00-B	

Benefits:

Faster bake times improve

Advanced air impingement

Technology enhances bake quality and uniformity.

Improved product flow

support for continued

Manitowoc STAR Service

New FastBake Technology

ovens without increased

quality! (Optional)

designed to bake up to 35% faster than other conveyor

noise levels or loss of product

Support is committed

to ongoing customer

satisfaction.

operational success.

during cooking reduces

Research and applications

time of service.

operation costs.



CLincoln IMPINGER®

Lincoln *Impinger* Conveyor Ovens are the premier continuous cook platform for the food service industry. Using the latest advancements in air impingement technology, *Impinger* ovens allow for rapid heating, cooking, baking, and crisping of foods, typically done two to four times faster than conventional ovens.

Easy to Operate:

- Digital controls with single on/off power switch.
- Microprocessor controlled bake time/conveyor speed.
- Improved view vacuum flourescent readout displays set temperature in degrees (F° or C°), conveyor belt speed, thermostat indicator light, and diagnostic messages for easy trouble shooting.

 All settings are automatically locked out to eliminate accidental changes.

Easy to Clean:

- Front door for easy cleaning and removal of finger assemblies.
- Conveyor is removable through the right side opening.

Optional Features:

- FastBake: Improve your bake time by up to 35% without increased noise levels or loss of product quality!
- Entry and exit shelves.
- · Flexible gas connector.
- Cleaning kit (#1050)
- Split Belt

Standard Features:

- Stackable up to two (2) oven cavities high.
- 32" (812 mm) wide, 73" (1854 mm) long conveyor belt with product stop.
- 40" (1016 mm) baking chamber.
- Temperature is adjustable from 250°F (121°C) to 600°F (316°C).
- Conveyor speed is adjustable from one (1) minute to thirty (30) minutes cooking time.
- Front-loading access door with cool handle.
- Customer-specific setups give customers very specific results.
- Indirect conveyor drive is powered by an AC motor.
- Stainless steel top, front and sides.
- Oven Start-Up/Check-Out by Manitowoc STAR service agent included in price.











Approved by The Canadian Standards Association









Gas Supply Pre	pply Pressure Recommendations: Recommendations: Mini		
Gas Type	Supply (Inlet) Pressure (mbar)	Gas Pipe Size	
Natural	7-14" WC (2.2 kPA / 22.4 mbar - 3.5 kPa / 34.9 mbar)	2" (51 mm)	
LP	11-14" WC (2.7 kPa / 27.36 mbar - 3.5 kPa / 34.9 mbar)	2" (51 mm)	

^{*}Gas supply pressures are dependent on local gas type and on all applicable local codes. Agency approved flexible connection to each oven must be minimum ¾"(19 mm) NPT and length must not exceed six (6) feet (1829 mm).

Electrical Service:

Each oven deck requires voltage, phase and hertz as indicated by model number. Neutral must be grounded at electrical service and receptacle properly polarized. Gas 120V units have a cord with NEMA 5-15 plug. All other models have terminal block connections. It is recommended that a separate circuit breaker be provided for each oven deck.

Recommended Minimum Clearances:

Rear of oven to combustible surface: 6" (152 mm). Clearance on right side from other cooking equipment: 24" (610 mm). Clearance required to remove conveyor for cleaning: 11' (3553 mm).

Warranty:

All new *Impinger* ovens installed in the United States and Canada come with a one (1) year parts and labor warranty starting from the date of start-up/check-out. All ovens installed in locations other than in the US and Canada are warrantied for one (1) year parts and ninety (90) days labor starting from the date of start-up/check-out. Start-up/check-out must occur within 24 months of date of manufacture.

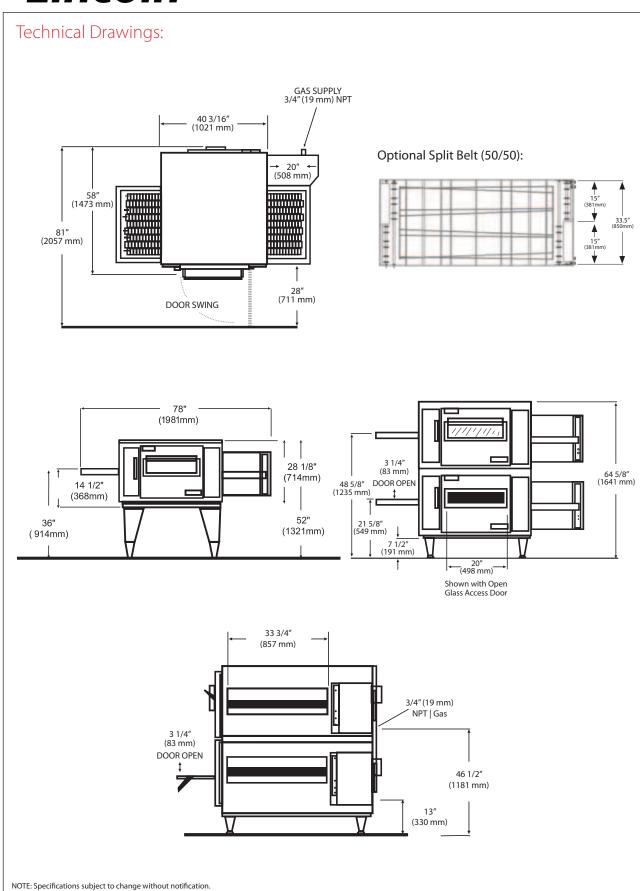
General Information:

All 1400 Models	Length	Depth	Height Single	Height Double Stacked	
	78″	58"	52"	64 ⁵ / ₈ "	
	(1981 mm)	(1473 mm)	(1321 mm)	(1641 mm)	

Model Number	Agency	Utility	Input Rate	Voltage	Hertz	Phase	Supply
1433-000-E	NSF/CE	Natural	120,000 BTU/Hr. 32.5 kW 126.6 MJ	230	50	1	3
1450-000-U	NSF/CSA	Natural		120	60	1	3
1456-V00-B	AGA/NSF	Natural		240	50	1	3
1434-000-E	NSF/CE	LP		230	50	1	3
1447-000-N		LP		220	60	1	3
1451-000-U	NSF/CSA	LP		120	60	1	3
1457-V00-B	AGA/NSF	LP		240	50	1	3
1421-000-E	NSF/CE	Electric		400/230	50	3	5
1452-000-U	NSF/UL/CSA	Electric		120/208	60	3	5
1453-000-U	NSF/UL/CSA	Electric		120/240	60	3	5
1454-000-N	NSF/UL/CE	Electric		380Y/220	50	3	5
1455-000-N	NSF/UL/CE	Electric		415Y/240	50	3	5
1458-000-E	NSF/UL/CE	Electric		400	50	3	4

NOTE: Panel setups are added as kit numbers to the end of the model number to complete the oven order; (example: 1450-000-U-K1801 is a 1450-000-U with standard setup, left to right.)





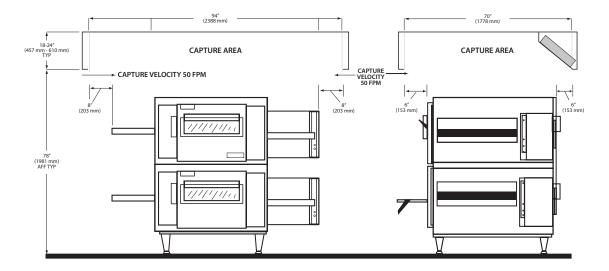


Capacity Estimates | Pies Per Hour:

	BAKE TIME								
Pie Size	3 min.	3½ min.	4 min.	4½ min.	5 min.	5½ min.	6 min.	6½ min.	7 min.
12" (30 cm)	182	155	135	120	108	99	90	84	78
14" (36 cm)	115	99	87	88	69	63	58	53	50
16" (41 cm)	101	87	76	67	61	55	51	47	44

Ventilation Requirements:

Ventilation is required. Local codes prevail. These are the "authority having jurisdiction" as stated by the National Fire Protection Association, Inc., in NFPA 96-1994. Estimates of CFM requirements can vary from 2400 to as high as 6000 CFM exhaust. In all cases the ambient temperature around the oven must not exceed 95°F (35°C) when the oven is operating. **This information is shown as a guideline for ventilating the Impinger* 1400 Ovens.**



- 1. Dimensions shown are for ovens without long extension shelves. The outside end of the conveyor frame must be a minimum of eight (8) inches (203 mm) inside the canopy as shown.
- 2. The capture velocity across the lower edge of the canopy is to be 50 FPM at sides and front.
- 3. Use filters at rear exhaust area of the hood, as shown. Do **not** just put an opening into a 4 sided canopy.
- 4. The ovens are to be centered in the canopy space left-to-right and front-to-back if possible.
- 5. A six (6) inch space at rear of oven is recommended for utilities.
- 6. Use of a Type I or Type II application and overall final installation is determined per local codes.
- 7. **Recommended 2400-3000 CFM exhaust**, typical, or higher per local codes; as a guideline to obtain adequate capture velocity.
- 8. **Recommended 80% of make-up air provided outside of the canopy** through perforated metal diffusers directed straight down... **not at the oven**; located at front, side or both.
- 9. Room air diffusers must not be directed onto the oven and should be positioned a minimum of three (3) feet from the perimeter of the hood to keep airflow from affecting the oven.

NOTE: Specifications subject to change without notification.

