

1400 Series Impinger I Oven

Models

- 1421-xxx-E
- 1433-xxx-U
- 1434-xxx-E
- 1450-xxx-U
- 1451-xxx-U
- 1452-xxx-U
- 1453-xxx-U
- 1454-xxx-N
- 1455-xxx-N
- 1456-xxx-B
- 1457-xxx-B



Standard Features

Air Impingement

Air impingement uses hot air under pressure which surrounds food with small jets of hot air. This allows for rapid heating, cooking, baking and crisping of foods, two to four times faster than conventional ovens, depending on food product cooked.

Uniform Heating

Uniform heating/cooking of food products offers a wide tolerance for rapid baking at a variety of temperatures.

Variable Speed Continuous Cook Platform

Variable speed continuous cook platform moves product through the oven one after another improving product flow during cooking eliminating the need for constant tending resulting in reduced labor.

Customized Air Flow

Customer specific finger panels allow for heat to be adjusted and controlled by zoning for menu flexibility.

Specifications

General:

- Stainless steel top, front and sides
- 40" (1016 mm) wide baking chamber
- 32" (813 mm) wide, 73" (1854 mm) long conveyor belt with product stop
- Front removable fingers
- Stackable up to two high
- Front loading glass access door with cool touch handle
- 3" (76.2mm) conveyor opening
- Includes oven start-up/check-out by Welbilt authorized service agent

Controls:

- Adjustable temperature from 250°F (121°C) to 600°F (316°C) to accommodate a wide range of products
- Adjustable conveyor speed from 1 to 30 minutes
- Digital controls with easy to read display panel
- controls temperature, belt speed and diagnostics

Cooking:

- Customer specific finger set-up for menu flexibility
- Optional FastBake technology - reduces cook time by up to an additional 30% with no food quality loss or noise increase

Options:

- FastBake technology
- 6' flexible gas connector
- 16" entry and exit shelves
- Split belt
- Folding conveyor
- High stand with casters (single stack)
- Low stand with casters (double stack)
- Stand with casters required to stack Impinger II on Impinger I



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Gas Supply Pressure Recommendations

Gas Type	Supply (Inlet) Pressure (mbar)	Recommended Minimum 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 3/4" (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: 5" (127 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 I ovens installed in the United States and Canada come with a three (3) 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 warranted for one (1) year parts and ninety (90) days labor starting from the date of startup/ check-out. Start-up/check-out must occur within 18 months of date of manufacture.

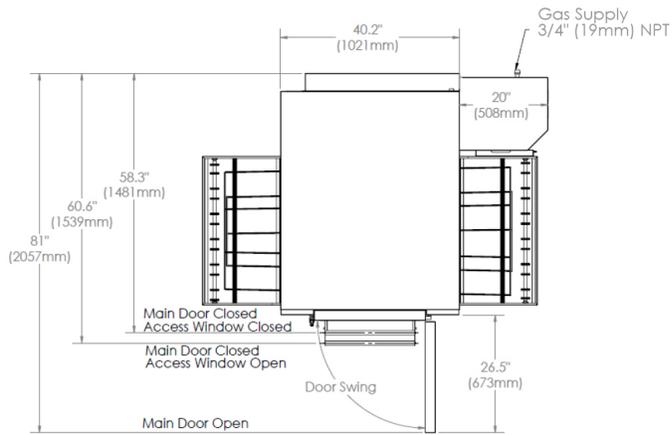
General Information

							APPROXIMATE SHIPPING DIMENSIONS				
	WIDTH	DEPTH	HEIGHT SGL STACK	HEIGHT DBL STACK	WEIGHT	SHIPPING WEIGHT	CU. FT.	W	D	H	CLASS
ALL 1400 MODELS	78" (1981 mm)	58" (1473 mm)	52" (1321 mm)	64 5/8" (1641 mm)	725 lbs (329 kg)	750 lbs (340 kg)	118	86	66	36	85

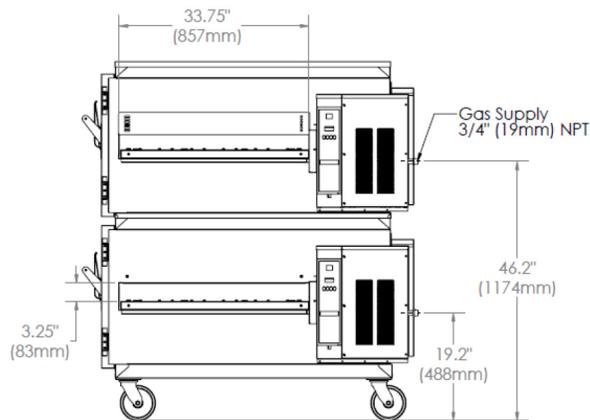
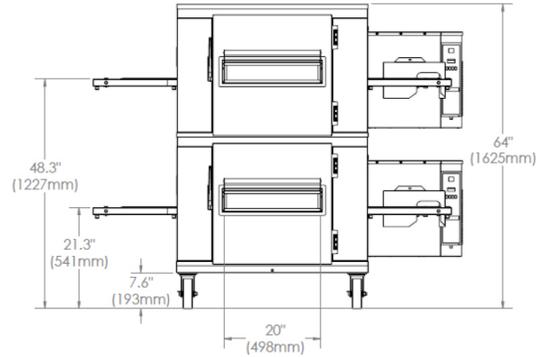
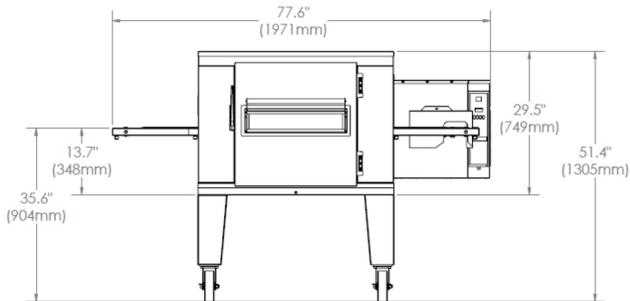
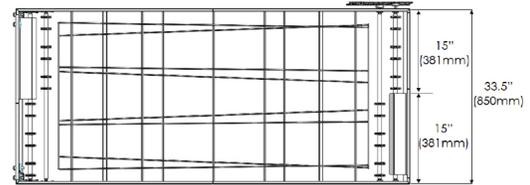
Model Number	Agency	Utility	Input Rate	Voltage	Amps	Hertz	Phase	Supply
1433-xxx-E	UL EPH/CE	Natural	120,000 BTU/Hr. 34.8 kW 126.6 MJ	230	3	50	1	3
1450-xxx-U	UL EPH/CSA	Natural		120	5	60	1	3
1456-xxx-B	AGA/UL EPH	Natural		240	5	50	1	3
1434-xxx-E	NSF/CE	LP		230	3	50	1	3
1451-xxx-U	UL EPH/CSA	LP		120	5	60	1	3
1457-xxx-B	AGA/UL EPH	LP		240	5	50	1	3
1421-xxx-E	UL EPH/CE	Electric	27 kW	400/230	40	50	3	5
1452-xxx-U	UL EPH/UL/cUL	Electric		120/208	80	60	3	5
1453-xxx-U	UL EPH/UL/cUL	Electric		120/240	70	60	3	5
1454-xxx-N	UL EPH	Electric		380Y/220	41	50	3	5
1455-xxx-N	UL EPH	Electric		415Y/240	38	50	3	5

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.)

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Optional Split Belt (50/50):



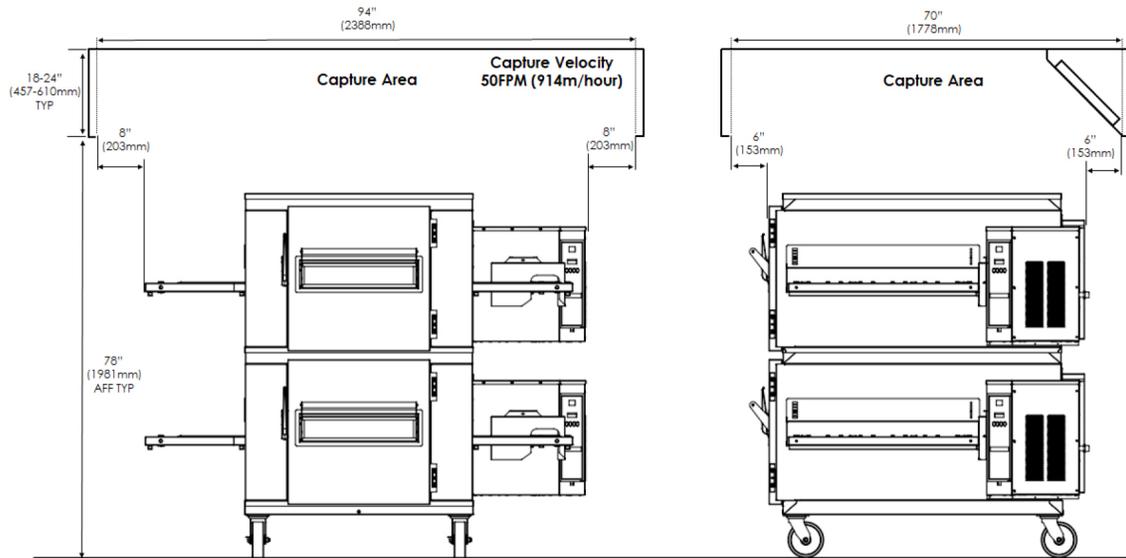
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Capacity Estimates | Pies Per Hour

Pie Size	BAKE TIME								
	3 min	3 1/2 min	4 min	4 1/2 min	5 min	5 1/2 min	6 min	6 1/2 min	7 min
12" (30 cm)	182	155	135	120	108	99	90	84	78
14" (36 cm)	115	99	87	77	69	63	58	53	50
16" (41 cm)	101	87	76	67	61	55	51	47	44

Ventilation

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 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.
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 2400-6000 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.

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