

1400 Series Impinger® I Single Belt Conveyorized Oven

| Project |
|-------------------|
| |
| Item |
| Quantity |
| CSI Section 11400 |
| |
| Approved |
| |
| Date |

Models

- 1421-000-E
- 1447-000-E
- 1452-000-U
- 1454-000-N
- 1457-V00-B

- 1433-000-E
- 1450-000-U
- 1453-000-U
- 1455-000-N
- 1458-P00-E

- 1434-000-E
- 1451-000-U
- 1454-000-U
- 1456-V00-V

1456-700-7

Benefits

Faster Bake Times

- Improved Response to Customer
- Advanced Air Impingement Enhances Product Quality and Uniformity
- Optional FastBake Technology Reduces Cook Time by Up to An Additional 35% With No Food Quality Loss or Noise Increase

Easier Operation

- Digital Controls with Single On/Off Switch
- Microprocessor Controlled Bake Time/ Conveyor Speed
- Locked Setting to Prevent Unintended Changes
- Fluorescent Display Indicating Temperature, Belt Speed, Thermostat, and Diagnostic Messages

Easier Cleaning

- Front Door for Finger Access and Removal
- Removable Conveyor Through Side
 Opening

Unparalleled Support

- Customer-specific Finger Setup for Menu Flexibility
- Research and Applications Team Help Achieve Ideal Cooking Results
- Manitowoc Star Service Committed to Owner Satisfaction



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.

Specifications

General

Stainless Steel Top, Front and Sides

40" (1,016 mm) Long Baking Chamber

Front Removable Fingers

Stackable Up To Two High

Includes Oven Start-Up Check-Out by Manitowoc STAR Authorized Service Agent

Conveyor

32" (813mm) Wide x 73" (1,854mm) Long

Side Removable

Product Stop

One to Thirty Minute Cook

Time

Reversible Indirect Drive with AC Motor

Cooking

Customer Specific Finger Setup

Temperature Range 260°F to 600°F (127°C to 316°C) Front Loading Glass Access Door with Cool to the Touch Handle

Digital Control Panel

Optional

FastBake Technology Reduces Cook Time by Up to An Additional 35% with No Food Quality Loss or Noise Increase

Entry and Exit Shelves

Flexible Gas Connector

Split Belt













www.lincolnfp.com 6566 04/18





Gas Supply Pressure Recommendations

| Gas sap | oply i ressure necommendations | Recommended Minimum |
|----------|--|------------------------|
| 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 minimum¾" (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 1 20V 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

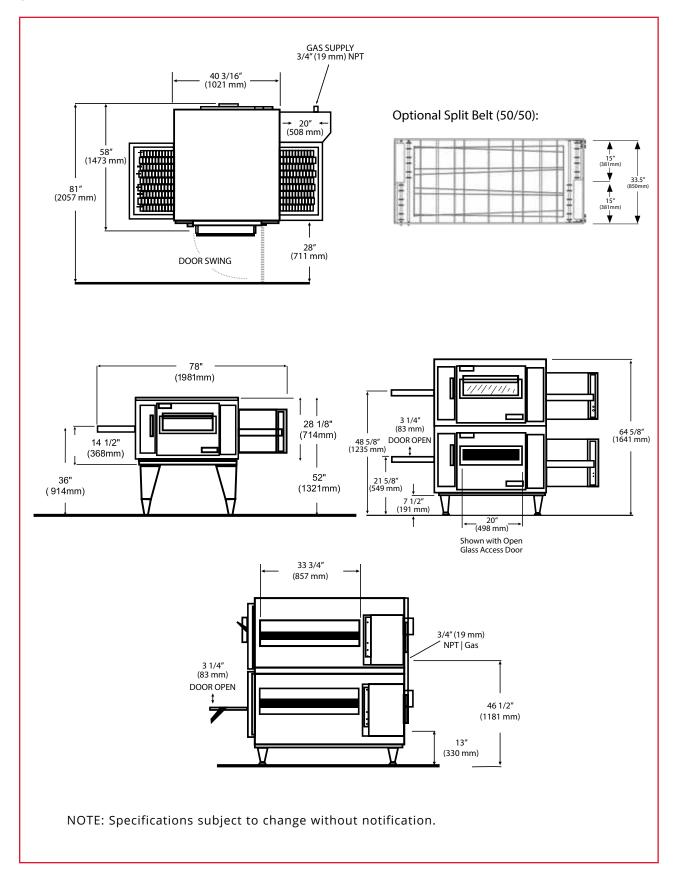
| All 1400 Models | Length | Depth | Height Single | Height Double Stacked |
|-----------------|-----------|-----------|------------------|--------------------------|
| All 1400 Models | 78" | 58" | 52" | 64 ⁵ /ε" |
| | (1981 mm) | (1473 mm) | (1321 mm) | (1641 mm) |

| Model Number | Agency | Utility | Input Rate | Voltage | Hertz | Phase | Supply |
|-----------------|---------------|----------|-----------------|----------|-------|-------|--------|
| 1433-000-E | UL EPH/CE | Natural | | 230 | 50 | 1 | 3 |
| 1450-000-U | UL EPH/CSA | Natural | | 120 | 60 | 1 | 3 |
| 1456-V00-B | AGA/UL EPH | Natural | 120,000 BTU/Hr. | 240 | 50 | 1 | 3 |
| 1434-000-E | NSF/CE | LP | 34.8 kW | 230 | 508 | 1 | 3 |
| 1447-000-N | UL SPH | LP | 126.6 MJ | 220 | 60 | 1 | 3 |
| 1451-000-U | UL EPH/CSA | LP | | 120 | 60 | 1 | 3 |
| 1457-V00-B | AGA/UL EPH | LP | | 240 | 50 | 1 | 3 |
| 1421-000-E | UL EPH/CE | Electric | | 400/230 | 50 | 3 | 5 |
| 1452-000-U | UL EPH/UL/cUL | Electric | | 120/208 | 60 | 3 | 5 |
| 1453-000-U | UL EPH/UL/cUL | Electric | - 27 kW | 120/240 | 60 | 3 | 5 |
| 1454-000-N | UL EPH | Electric | 2 / KVV | 380Y/220 | 50 | 3 | 5 |
| 1455-000-N | UL EPH | Electric | | 415Y/240 | 50 | 3 | 5 |
| 1458-000-E | UL EPH/UL/cUL | Electric | 1 | 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.)









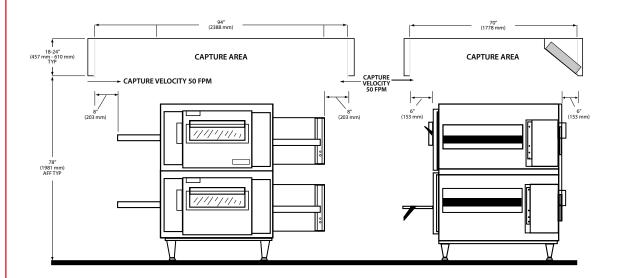


Capacity Estimates | Pies Per Hour

| | 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.
- 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.

Welbilt reserves the right to make changes to the design or specifications without prior notice.

