



Pizza Production



Fully assemble pizzas being frozen prior to packaging in a CRYOLINE® UPF ultra performance plus spiral freezer.

Linde's temperature controlled freezing and chilling processes improve overall pizza quality while increasing yield and reducing production time. Combining a variety of processes brings all the components of your pizza product together ready for assembly, final freeze, packaging, and shipment.

Predictable, Precise Temperature Control Throughout the Process

Freezing and chilling pizza components using cryogenic gases and the selection of Linde equipment system rapidly removes heat and helps maintain the inherent properties of each individual ingredient. Moisture retention is important for the integrity of the product and using a quick cryogenic process helps lock in the natural product moisture.

Sauce

Cooling sauces and other liquid food products following the cooking stage is a critical step. If not done quickly, the delay may result in decreased product quality, increased waste product, or creation of production bottlenecks. Linde offers the ACCU-CHILL® SC nitrogen injection cooling system to rapidly reduce sauce temperature. This application halts the thermal process and readies your sauce for storage or immediate use.

Proteins

Chilling the product to a target temperature reduces the opportunity for bacterial contamination leading to spoilage. Cryogenic chilling helps dissipate the heat generated during grinding and ingredient incorporation. For ground products, Linde's ACCU-CHILL® CBC meat mixer injection cooling is ideal for maintaining a low temperature during grinding and ingredient incorporation.

Toppings

Raw, cured or cooked ingredients benefit from precise temperature control to maintain proper moisture levels and retain visual appeal. Rapid heat removal with either liquid nitrogen or liquid carbon dioxide gas precisely controls the processing temperature to quickly chill or produce individually quick frozen (IQF) pieces in either the CRYOLINE® UPF ultra performance flighted freezer or the ACCU-CHILL® CRC continuous rotary chiller.



Predictable, Precise Temperature Control Throughout the Process (continued)

Cheese

Keeping shredded cheese cool reduces clumping and helps improve handling. Chilling the shredded product in the continuous rotary chiller removes heat and helps ensure product integrity during conveyance, minimizing fines. If a pre-melt step is part of your process to ensure proper cheese placement, a Linde tunnel freezer can economically crust freeze assembled pizzas downstream of a melter to provide a clean, finished product and avoid smearing and adhesion to packaging materials.

Crust

For ease of handling and assembly, pre-freezing the crust has been shown to improve productivity. Adding cooled sauce and well chilled and frozen ingredients on top of the firm crust allows for precise assembly. The final freeze step ensures the product is ready for shipment or storage. The CRYOLINE® UPF ultra performance tunnel freezer or the CRYOLINE® UPS ultra performance spiral freezer are great choices for achieving the final target temperature.

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| Features | → Minimal floor space requirements | → Continuous in-line processing |
| | → Rapid heat removal | → Automated temperature control systems |
| | → Equipment meets USDA sanitary clean up guidelines | |
| Benefits | → Achieve consistent product quality | → Product testing and cryogenic system recommendation using |
| | → Reduce losses stemming from dehydration, yield, and out of spec product | → Linde’s food laboratory |
| | → Improve production rate | → Easy to maintain |

Contact Linde Today

For more information about ultra performance applications, developed from years of freezing and chilling research with cryogenic gases, contact Linde at **1-844-44LINDE**, or visit our website at www.lindefood.com.

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