Boost Production With Liquid Nitrogen

Immersion freezing with liquid nitrogen is the fastest freezing method available to the food industry. The Linde immersion system is able to utilize either conveyor belt or optional top loading of product. The result is an instant crust freeze that locks in natural flavors and moisture, increases yield and maintains original product quality. You also get an immediate production increase for in-line freezing equipment that follows the Linde immersion system.

What’s new is the focus on sanitation as specified by the new USDA guidelines for equipment. Linde has incorporated changes throughout the CRYOLINE ultra performance line of products to meet the new sanitation guidelines. For the ultra performance immersion, other improvements include complete access for thorough cleaning, a belt lifting system for cleaning the bath, and the longest $N_2$ bath available in the industry. You benefit when the immersion is connected in-line to other Linde cryogenic freezers by utilizing the cold vapor to increase cooling throughout the line.

Features

- Maximum achievable bath length
- Separate, shallow liquid nitrogen bath uses the minimum amount of $N_2$ for both cool down and freezing
- Side doors open to allow for cleaning from both sides of the freezer; automated system lifts belt above bath
- Proportional level control systems with PID loop and new digital display for accurate liquid nitrogen control
- Safety systems that prevent opening freezer until all cryogen has vaporized
- Unique cold exhaust system minimizes room air make-up for reliable operations with extremely cold $N_2$ vapor
- Quick installation. Easy to operate, maintain and clean
- Readily integrates into existing production lines
- Fabricated to meet USDA sanitation guidelines (http://www.ams.usda.gov/dairy/meat_poultry.htm)

As product travels through the ultra performance immersion freezer it is submersed in a liquid nitrogen bath.
Benefits

→ Instantly crust freezes product increasing yield and preserving product quality
→ Increases production volume and throughput
→ Ideal for difficult to handle, wet, fragile, IQF and high-value-product
→ Mates with either cryogenic or mechanical systems
→ Reduces product damage and yield loss due to belt adherence
→ Extends belt life of downstream freezing equipment; minimizes belt marks
→ Belt-lift systems enhances easy cleaning of N₂ bath

Dimensions and Weights (approximate)

<table>
<thead>
<tr>
<th>Model X</th>
<th>Length X</th>
<th>Width w/ doors open</th>
<th>Usable belt width</th>
<th>Overall height</th>
<th>Adjustable Entrance and Exit height</th>
<th>Shipping Weight (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>640</td>
<td>10’3”</td>
<td>10’6”</td>
<td>40”</td>
<td>7’1”</td>
<td>34”</td>
<td>2,500</td>
</tr>
<tr>
<td>940</td>
<td>10’3”</td>
<td>10’6”</td>
<td>40”</td>
<td>7’1”</td>
<td>34”</td>
<td>3,000</td>
</tr>
<tr>
<td>1240</td>
<td>16’7”</td>
<td>10’6”</td>
<td>40”</td>
<td>7’1”</td>
<td>34”</td>
<td>4,000</td>
</tr>
</tbody>
</table>

Contact Linde Today

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