

The Freshline<sup>®</sup> CP immersion freezer— From crust to full freeze in just 10 feet

#### Products suitable for freezing in the Freshline CP immersion freezer:

- Cooked or raw products
- Whole pieces
- Diced and cubed products and fajita strips
- All types of meat, including beef, chicken, pork, sausage
- Pizza toppings
- Berries and other fruits
- Vegetables
- Small seafood, including scallops and peeled and deveined shrimp
- Chicken parts—strip thigh meat, boneless breasts, tenders, wings, and drumsticks



Whether you are running low on space and capital or are plagued with clumping problems during your freezing operation, you may benefit from Air Products' Freshline CP immersion freezer.

The Freshline CP immersion freezer can be installed for low capital costs and can fully freeze over 3000 pounds per hour in just 10 feet of floor space. The freezer uses Air Products' proven liquid nitrogen immersion technology in a multitiered freezing system to maximize efficiency. The system can freeze many types of products and is especially suited to freeze small products that tend to clump together.

### Why choose the Freshline CP freezer?

**Small footprint:** The freezer's compact size of 10 feet may enable you to add capacity or start your first freezing operation.

**Improved product quality:** Products are initially crust-frozen in a liquid nitrogen (LIN) bath, which locks in moisture, helping to prevent dehydration and resulting weight losses and quality deterioration. Products frozen in the Freshline CP immersion freezer may have improved taste, texture, and appearance over those frozen in mechanical freezers, which typically freeze at a much slower rate.

**Low capital costs:** Because it uses LIN as the refrigerant, the Freshline CP immersion freezer requires a significantly lower capital investment than that for mechanical freezers. This makes the freezer ideal for small food producers who want to offer a high-quality, individually quick-frozen product but lack the capital to enter the market.

**Reduced clumping:** The Freshline CP immersion freezer is well suited for small products that are difficult to individually quick-freeze because they tend to stick together. Products are instantly crust-frozen, helping to prevent clumping. Also, products drop to two lower levels as they are conveyed to full freeze. This extra motion also helps reduce clumping.

**Minimal cleaning and maintenance costs:** The Freshline CP immersion freezer is easy to clean and maintain because of its simple design, construction, and few moving parts. Also, since the system uses nitrogen, the snow builduptypically associated with carbon dioxide freezing is eliminated.

#### **General Specifications**

Overall width	11'8"
Overall length	7'10"
Overall height	8'7"
Belt width	48" usable
Length of immersion	4'6"
Production volumes	Up to 3000 lbs/hr (depending on product)
Electrical supply:	460V, 3 PH, 100 AMP

# Combine the Freshline CP freezer with your current in-line system to boost its freezing effectiveness.

In addition to a stand-alone immersion unit, the Freshline CP freezer can be combined with an existing freezing system. The Freshline CP immersion freezer enables processors who use conventional mechanical or cryogenic spiral or tunnel freezing systems to realize the increased yields and throughput and the enhanced product quality associated with LIN crust-freezing. When placed in front of an existing freezing system, this immersion freezer can crust-freeze up to 6000 pounds per hour of a broad range of products, including seafood, poultry and other meat products, and prepared foods. The conveyor then delivers the product into your existing freezer to finish the freezing process.

When adding the Freshline CP in front of a mechanical freezer, product throughput can be increased significantly because this freezer can complete 20%–25% of the total freeze in seconds, significantly reducing the heat removal loads for the mechanical freezer. When used with a cryogenic freezing system, cold exhaust gas from the Freshline CP freezer can also be transferred to your cryogenic spiral freezer to maximize total freezing efficiency.

## How does it work?

The Freshline CP immersion freezer is a multitiered freezing system. Products are either conveyed or dropped into the first tier of the freezer, an immersion bath of liquid nitrogen. Here they are crust-frozen to lock in moisture and prevent clumping. The crust-frozen products then drop onto the remaining tiers. As they are conveyed, cold nitrogen gas generated in the immersion section completes the freezing process while also maximizing efficiency.

# Ask Air Products . . . and expect more

Whether your packaging, cooling, chilling or freezing applications include bakery goods, fruit and vegetables, poultry, meats, ready meals or anything in between, Air Products' Freshline solutions offer you the highpurity gases and equipment, the international supply capability, and -- most important—the unmatched industry experience and technical support to help you succeed just about anywhere in the world. We can help you improve your productivity, lower your costs, maximize your returns, and, as a result, help make you more competitive in a very competitive market.

# For more information, please contact us at:

#### Corporate Headquarters

Air Products and Chemicals, Inc. 7201 Hamilton Boulevard Allentown, PA 18195-1501 T 800-654-4567 F 800-272-4449 gigmrktg@airproducts.com



