Freshline®
EF tunnel freezer
Compact and easy to use

Start freezing your food products worry free with the Freshline® Easy Freeze tunnel freezer.

The Freshline® EF tunnel freezer has been designed to be the easiest solution to start a new freezing line:
- Affordable - Rental possibilities
- Short delivery times
- Quick to install and startup
- Easy to operate (intuitive interface & prerecorded recipes), maintain and clean.
- Bespoke in-house safe and hygienic equipment design
  - Excellent nitrogen efficiency
  - Suitable for just about any product
  - Customizable on demand:
    - Freshline® Process Intelligence service which enables our experts to remotely monitor your equipment to improve and optimise your processes
    - Different sizes available
  - And as standard with all Air Products Freshline® solutions
    - Ultra-fast & quality cryogenic freezing
    - Air Products’ food grade nitrogen compliant with all regulations and best practices
    - Air Products’ ongoing support and vast expertise
    - Safety & tunnel operation training
    - Audits and assistance

Are you new to freezing/chilling? The Freshline® EF solution will help you:
- Easily and rapidly start up a continuous freezing/chilling line producing high-quality products with minimum upfront capital investment
- Try out and test new products: it’s simple to switch from one product to another
- Freeze to order: fast freezing (minutes rather than hours) means no need to store large quantities of product.
- Flexible programming for a wide range of products

Are you already freezing/chilling? The Freshline® EF solution will help you:
- Expand your freezing capability without investing in new equipment (rental possibilities)
- Increase productivity—more time to run product and less time moving the product around from a process to a cooling area, reducing costly product handling
- Alleviate bottlenecks in your process—freeze to order
- Respond to your customers’ needs quickly and more efficiently
- Extend your market by adding value to your products—fast freezing improves product quality
- Try out and test new products.
Why cryogenic freezing rather than other technologies?

Cryogenic freezing technologies use the extreme cold temperatures of liquid nitrogen (-196°C) to ensure an exceptionally high freezing speed leading to a significant reduction in freezing time and the reduction in size of the ice crystals.

A faster freeze and smaller ice crystals in the frozen product means:
- Reduction in weight loss caused by dehydration
- Increase in product quality and improvement in texture
- Preservation of the appearance and colour of the product
- Quick start up increasing the flexibility in production
- Lower financial investment
- Minimal installation cost
- Reduction in space taken up by the equipment
- Low maintenance
- Reduced cleaning time
- Environmentally friendly freezing solution
- Flexible throughputs - just change the temperature and belt speed

Air Products’ team of in house experts has considerable knowledge of gas-based technology in the food industry. By performing audits of your process they will work with you to develop the best solution for each production requirement.

General specifications

The Freshline® EF freezer is an easy-to-operate cryogenic freezing tunnel. It is the ideal solution for food processors who wish to start freezing or increase their freezing capacity to up to 500 kg/hr (depending on the product) with minimum upfront investment. If you need higher throughputs, please ask about our Freshline® MP freezer.

The Freshline® EF freezer is available in 1 belt width (1000 mm), with a range of belt weaves, and 2 belt lengths (4 or 6 meters.) The table gives details of the different Freshline® EF tunnel freezers. Electrical¹ and pneumatic² requirements can be found in the notes section.

<table>
<thead>
<tr>
<th>Model⁶</th>
<th>Overall length (m)</th>
<th>Freezing length (m)</th>
<th>Belt width (m)</th>
<th>Overall width² (m)</th>
<th>Overall height³ (m)</th>
<th>Total weight (Kg. approx)</th>
<th>Electrical power requirements (kW)¹</th>
<th>Typical freezing capacity⁵ (Kg/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshline® EF 1000.4</td>
<td>5.9</td>
<td>4</td>
<td>1.0</td>
<td>1.8</td>
<td>2.5</td>
<td>1700</td>
<td>6</td>
<td>300</td>
</tr>
<tr>
<td>Freshline® EF 1000.6</td>
<td>7.8</td>
<td>6</td>
<td>1.0</td>
<td>1.8</td>
<td>2.5</td>
<td>2500</td>
<td>8</td>
<td>500</td>
</tr>
</tbody>
</table>

1 Electrical requirement: 400V, 3 phase and E, 50Hz
2 Pneumatic requirement: 1 Nm3/h @ 5-7 barg
3 Overall width excludes control panel and exhaust
4 Height quoted is when the tunnel is in an open position. All heights are subject to variation due to height adjustment on legs.
5 Freezing capacity is dependent on product and operating conditions. Higher throughputs may be possible.
6 Air Products’ policy is one of continuous improvement and as such some details may be subject to change. Therefore, any details quoted need to be confirmed for individual machines.

Ask Air Products ... and expect more

Whether your MAP, cooling, chilling or freezing applications include fruit and vegetables, poultry, meats or anything in between, Air Products’ Freshline solutions offer you the high-purity 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.