



# Outstanding continuous ice cream freezers







# Exceptional quality and economy

Tetra Pak® has developed a range of outstanding continuous ice cream freezers that combine exceptionally uniform product quality with the best lifecycle economy in the business.

## Pioneering innovation

We introduced the first ice cream freezer more than 60 years ago, with a strong focus on quality and craftsmanship. The fact that some of those first freezers are still in operation today is evidence of that. But Tetra Pak also believes in continuous innovation. We were first to launch a computerized freezer and pioneered the Tetra Hoyer® DeepBlue low-temperature freezers. Now our latest generation of continuous freezers are full of innovations that dramatically cut your production costs, boost your uptime and assure amazingly uniform product quality.

## Delicious ice cream

Tetra Pak freezers enable you to create ice cream products with the desired smoothness and mouth-feel. And the flexibility to handle thousands of different recipes by freezing, churning, blending, re-circulating and aerating the mix in the optimal way needed to produce delicious ice cream for virtually all tastes and occasions.

## Safe and consistent

All Tetra Pak freezers are designed to ensure uncompromising food safety and extremely uniform product quality. This not only enables you to comply with the most stringent food safety regulations anywhere, but also to meet your quality specifications time after time, year after year, with a minimum of product loss and giveaway.

## Easy to operate

Tetra Pak freezers are surprisingly easy to operate – even for operators with limited training. The high level of automation and user-friendly touchscreen panels help to prevent human error and give maximum efficiency. Moreover, the freezers are designed for easy cleaning and built for very low maintenance.

## Reduced production costs

Tetra Pak freezers cut your production costs, giving you the lowest total cost per ice cream product, thanks to:

- Fast freezer start-up
- Reduced ice cream waste
- Very low standard deviation for portion control
- Short CIP times
- Rapid product changeovers
- Minimal downtime
- Optimal lifecycle economy

## Rapid response – everywhere

Tetra Pak is a leading international company with a strong local presence in more than 165 countries worldwide. No matter where you are in the world, you can expect rapid response to your enquiries or needs. You can also benefit from a comprehensive customer care programme that provides excellent technical service and support.

## Our outstanding freezer range

### Tetra Pak Continuous Freezer S

Freezers with self-contained HFC refrigeration

### Tetra Pak Continuous Freezer

Freezers with central refrigeration

### Tetra Pak LT

Our unique low-temperature freezer



# Profit-boosting performance

**Tetra Pak® has developed a range of outstanding continuous ice cream freezers that combine exceptionally uniform product quality with the best lifecycle economy in the business.**

## **Faster freezer start-up**

A rapid decrease in temperature and stabilization of production parameters during start-up are primarily attained through:

- Advanced PLC control incorporating improved and faster control loops
- **Unique cylinder design for efficient cooling**
- Optimal recipe control

## **Less waste secures higher earnings**

Our freezers incorporate a number of important features that cut product waste:

- Accurate weight with extremely low standard deviation (in some cases <0.7%) that minimizes giveaway and product rejects.
- The Continuous Freezer A2 is equipped with a start-up procedure that is designed to minimize the waste during start-up of the freezer. During the start-up procedure, when the freezer is initiating the cooling, the freezer will optimize the amount of mix according to the overrun pre-set, and add air to achieve the desired overrun in first batch.
- Automatic compensation for atmospheric pressure changes.
- Automatic process regulation optimized for capacity, viscosity and overrun.

## **Exceptionally consistent products**

A unique feature of Tetra Pak's continuous ice cream freezers is their ability to consistently deliver uniform products for an enormous range of recipes, regardless of the number and variety of ingredients. This reduces product loss, thanks to fewer rejects. It reduces giveaway of expensive ingredients. And it enables you to build strong brands for products that are consistently delicious, every time.

## **Built for safety**

Effective air filtration prevents oil aerosols from entering the ice cream. An efficient air drying system minimizes humidity of air for overrun to reduce the risk of bacterial contamination. And a fully welded and closed roof cabinet prevents entry of dirt. Naturally, our freezers comply with European CE hygiene standards EHEDGE and are 3-A approved according to the American Sanitary standards.

## **Extreme cleanability**

To facilitate the strictest level of hygiene and give you the shortest possible CIP times, Tetra Pak freezers incorporate a number of novel design features, including:

- Use of stainless steel wherever possible to enable rapid cleaning
- No overlapping surfaces of frame and sheeting
- No dead ends that can create dirt traps
- Efficient and effective CIP control programs
- Cylinder designed for rapid drainage and thorough drying to prevent contamination

## **Reliable guarantees**

Our freezers deliver truly outstanding performance. That's why we can guarantee their performance – but not just with words. A Tetra Pak guarantee is more than a wish, more than good intentions. It's a promise that we keep, and that you can rely on.

***Faster start-ups mean less waste, minimal rework of mix and longer production times to give you significant cost-savings.***



# A freezer for every need

Tetra Pak provides the widest choice of automated, continuous ice cream freezers, with the greatest uniformity of product quality and the lowest total production cost per ice cream product available anywhere.



## Tetra Pak Continuous Freezer S

These robust freezers are the ideal choice for medium-size and smaller production, giving great product uniformity and low production cost. Each freezer is equipped with a self-contained HFC refrigeration unit.

Model	litres/h	US gallons/h
Continuous freezer S300	75 - 300	20-80
Tetra Pak Continuous Freezer S700 A	150 - 700	40 - 185
Tetra Pak® Continuous Freezer S 1500 A	300 - 1500	80 - 400

Actual outlet capacities will depend on mix formulation, outlet temperatures and other factors. Capacities are based on 100% overrun.



## Tetra Pak Continuous Freezer

These freezers cover a huge capacity range – from 40 l/h all the way up to 4300 l/h, with the very lowest standard deviation and the lowest cost per ice cream produced by any freezer on the market. They are linked to a central refrigeration unit that can use ammonia (NH<sub>3</sub>) carbon dioxide (CO<sub>2</sub>) or an HFC gas.

Model	litres/h	US gallons/h
Tetra Pak Continuous S 80 A1	20 - 100	5 - 26
Tetra Pak® Continuous Freezer 500 A	50 - 500	13 - 130
Tetra Pak Continuous Freezer M2	100 - 1000	27 - 265
Tetra Pak Continuous freezer 1000 A	110 - 1100	29 - 290
Tetra Pak Continuous Freezer 2000 A	250 - 2500	66 - 660
Tetra Pak Continuous Freezer 3000 A	320 - 3200	85 - 845
Tetra Pak® Continuous Freezer 4000 A	450 - 4500	119 - 1190

Actual outlet capacities will depend on mix formulation, outlet temperatures and other factors. Capacities are based on 100% overrun.

\*Self-contained freezer for laboratory use.



## Tetra Pak Low Temperature LT

These unique second-stage freezers are based on our revolutionary low-temperature ice cream concept, using Microform technology to create a stable, fine-structured ice cream with exceptionally creamy product quality. Three sizes are available.

Model	litres/h	US gallons/h
Tetra Pak low Temperature Freezer LT S300 A1	80 - 300	21 - 79
Tetra Pak low Temperature Freezer LT 1400 A1	500 - 1500	130 - 400
Tetra Pak low Temperature Freezer LT 3000 A1	1000 - 3000	265 - 800

\*Self-contained freezer for laboratory / pilot-plant use.











# Value-adding customized service

Tetra Pak is much more than a supplier of equipment. We're a full system provider that focuses on your specific needs, including customized service solutions maximize your operational excellence, minimize your cost and environmental impact, and ensure the right product quality every time, throughout the lifecycle of your operation.

Our expert engineers combine vast experience with the latest updates and the skill to keep your freezers and other equipment running optimally. We provide a wide range of services, including:

**Automation services** to secure performance and reduce unplanned stops, achieve high plant-wide availability and improve overall profitability.

**Environmental services** to reduce environmental impact (carbon and water footprint) and operational costs.

Improvement services that deliver sustainable performance improvements, e.g. reduced waste, increased uptime, enhanced staff capability, and reduced operational cost.

**Installation services** to ensure fast and trouble-free start-up, covering everything from layout design and engineering to on-time and on-budget project delivery.

**Maintenance services** that combine cutting-edge preventive and corrective maintenance to secure equipment performance with minimal production disturbance.

**Parts and logistics services** for effective management of your parts inventory and order administration.

**Quality management services** to help assure that you consistently achieve the desired end-product quality.

**Remote services** with preventive and corrective intervention to resolve unplanned stops and predict possible failure using expert support by telephone, camera, and direct electronic connection to equipment.

**Training services** with the latest training methods, technologies, and tools to help you increase your productivity through expertly trained operator, maintenance, quality and management personnel.

Tetra Pak can thus add value to your business by supporting your maintenance staff and improving your productivity by:

- Increasing uptime and performance
- Ensuring consistent desired product quality
- Minimizing total cost of ownership
- Reducing environmental impact
- Maximizing equipment lifetime



## Exceptional performance in ice cream production

Tetra Pak delivers performance by focusing on customized production solutions, not merely individual machines and components.

Our line solutions for ice cream production incorporate the best of our processing technology and applied automation know-how, and give ice cream producers a future-proof investment that can be upgraded and expanded as needs change.

We enable ice cream producers to achieve exceptional performance over the lifecycle in terms of consistent product quality, uncompromising food safety and greater efficiency with minimal environmental impact for long-term sustainable growth.

Exceptional performance – we guarantee it!